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ABSTRACT

This Matrix for Planning presents an organized format for systematically recording information relevant to the formulation of long-range planning policies and decisions for the Massachusetts Community Colleges. The matrix organizes existing data into a four-fold conceptual structure: people, programs, facilities, and funding. The first category (people) includes enrollment figures, faculty and staff headcounts, a demographic profile of students, a description of faculty activities, and an assessment of the community colleges' share of Massachusetts higher education enrollment. The second category (programs) identifies current programs, and programs planned for the future. The overall effectiveness of the system is assessed by presenting figures on degrees and certificates awarded, and data reflecting the community colleges' accessibility to students from varying income groups. The third category (facilities) assesses the system's current land and building holdings, space utilization, and current space rental. Finally, the fourth category (funding) reports on expenditures in the last fiscal year, and on costs per student per college and per program. Significant features and leading questions pertaining to the information displayed are identified, as are the additional information, procedures, and policy decisions that would be required for a continuous planning process. (NHM)

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OCTOBER 1975

MASSACHUSETTS BOARD OF REGIONAL COMMUNITY COLLEGES

MATRIX FOR PLANNING

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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JC 760 352

Mr. O. Robert Simha, Chairman
Long-Range Planning Committee
Massachusetts Board of Regional Community Colleges
177 Milk Street
Boston, Massachusetts 02109

Dear Mr. Simha,

Enclosed is a copy of our summary report: Matrix For Planning. A draft copy was prepared and presented to the Board on 30 June 1975. Reactions and comments from the Board, the Presidents of the Colleges and Dr. William G. Dwyer and his staff were then solicited, received and welcomed. Additional factual material based on those reactions has been incorporated in this report.

We hope all continue to find this Matrix a useful tool in decision-shaping as the Colleges address the uncertain future.

Richard P. Dober, AIP
Dober and Associates, Inc.
30 October 1975

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Mr. O. Robert Simha, Chairman
Long-Range Planning Committee
Massachusetts Board of Regional Community Colleges
177 Milk Street
Boston, Massachusetts 02109

Dear Mr. Simha,

We are pleased to submit this draft summary report on our master planning studies for the Massachusetts Board of Regional Community Colleges.

The report begins with a planning profile of the colleges as structured from available information gathered by our office for this purpose.

The profile information is grouped into four categories: people, programs, facilities and funding.

As an introduction to each category, we comment on the significant features of the information, identify the leading questions which come to mind after evaluating the material and end with a discussion of what additional information would be desirable for long-range planning purposes.

We then outline our views about what might be contained in a summary long-range planning document and address the question of what would constitute a continuous planning process.

Throughout this effort, we have received excellent cooperation and help from Dr. William G. Dwyer and his staff, the Presidents of the colleges and their staffs, Dr. George Weathersby and, of course, your committee.

My associates, Irene Podger, Arthur Lidsky, John Ullberg and Martha Pearson, who have worked on this project with me appreciate the opportunity to serve the Board during these eventful times.

Cordially yours,

Richard P. Dober, AIP

Dober and Associates, Inc.
26 June 1975

At the time of the Study.

TABLE OF CONTENTS

Note		1
Item 1:	How many people were directly involved?	3
Item 2:	Who are the students?	9
Item 3:	Who are the faculty?	26
Item 4:	What do the faculty do?	28
Item 5:	How many people are involved in supporting staff roles?	30
Item 6:	What share of the Massachusetts higher education enrollments do the Community Colleges now represent?	34
Item 7:	What programs are offered now?	38
Item 8:	What programs are being planned?	41
Item 9:	What level of achievements have the colleges reached?	42
Item 10:	How accessible are the Community Colleges?	45
Item 11:	How many students have gone on to other higher education institutions?	49
Item 12:	How much land and buildings has the Board developed to date?	50
Item 13:	How is the space used?	54

TABLE OF CONTENTS - continued

Item 14:	How much space is rented?	55
Item 15:	How much money in the last fiscal year was expended?	57
Item 16:	What were the costs per student per college and per program?	60
A Planning Definition		63
Continuing Planning and Information Flow		66
Appendix A - Information Available		73
Appendix B - Community College Priorities		75

NOTE:

The phrase Matrix for Planning is meant to suggest an organized format for systematically recording information about the colleges and the system as a whole as it pertains to formulating long-range planning policies and decisions.

There is an obvious overlap between this kind of information and that which is useful for everyday management purposes, but it is the latter that has guided our search for and selection of material.

The information displayed is that which was readily available at the central office and at the colleges. The material was not validated by us but used as received, though we have made some corrections in material that was obviously erroneous by making further requests for data and explanatory material.

The conceptual structure of the Matrix is simple: people, programs, facilities and funding.

To help the reader through the available material, which constitutes the present draft of the Planning Matrix, we have introduced each section and sub-section with a key question.

In addition to the material represented in this report other raw data have been collected in our study. This information, once clarified and confirmed as to accuracy, will also be useful for planning purposes. A listing of the additional available information is shown in Appendix A.

As a by-product of the master plan revision activities we recommend that some final version of the Matrix for Planning be prepared--perhaps in loose leaf form--so that all Board memebers and other designated people would have a fact book on the individual colleges and the system as a whole.

By using the loose leaf format, revisions could be published periodically. It would represent an important part of an on-going planning process.

The Community Colleges will be subject to increasing competition for financial resources in the coming decade. A broader, more accurate, focused information base will be essential to successful participation in public debate. This is another good reason for having a well documented profile of the Colleges and the system.

1

Item 1

How many people were directly involved in community college educational activities in 1975?

Exact figures are not available, but a deductive estimate is 79,375 people.[a]

We have arrived at this estimate as follows:

26,846	Head count students/day/spring 1975.
34,444	Head count students/evening/spring/1975.
2,716	Head count students/day/fall 1974. Not enrolled in spring 1975.[b]
3,136	Head count students/summer 1974. Not enrolled in any division during the year.[c]
7,500	Students affected by other educational activities at the campuses and not enrolled in any of the above.[d]
74,642	Subtotal, head count students
1,609	Daytime faculty
1,094	Daytime staff not counted as faculty
2,000	Evening and summer faculty and staff not counted above, estimated crudely[e]
4,703	Subtotal, faculty and staff
30	Central office
79,375	Total people

a. There is no easily available information about exactly how many individual people are receiving educational services from the community college system.

b. An informed guess based on an overall withdrawal, transfer, or graduation rate of 10 percent of the fall 1974 head count enrollments. This is a conservative figure.

c. An informed guess: 20 percent of the summer enrollments are not enrolled in any fall 1974/spring 1975 programs.

d. An informed guess based on an average of 500 people per campus. This is probably a conservative estimate.

e. The number of evening and summer faculty was available from four colleges as well as enrollments. A ratio of faculty to students was derived and then applied to the remaining colleges.

Further refinement of these figures would be advantageous to the Board, especially in light of public debates on higher education.

Clearly continuing education--the evening division--is an increasingly significant part of the Board's educational activity.

By head count there are more students enrolled

in the evening division than the day division, approximately 34,000 versus 26,000 students.

Information that makes it possible to compare day and evening programs in terms of credit hours offered, type of student, type of programs, actual costs, etc., is not available in a uniform format systemwide.

From interviews and field trips it is clear that the evening program is most important to the local colleges for these reasons:

1. It provides degree-granting educational opportunities to those unable to enroll in the day programs.

2. It provides educational and cultural opportunities for those not involved in a structured, sequential educational program.

3. It affords the colleges the opportunity of trying out new courses and programs without the constraints of the daytime procedures--an initiating factor.

4. It allows the college to meet almost instantly community educational needs--a responding factor.

5. It allows the college to try out teachers without the commitment to full-time employment.

6. It provides additional compensation to daytime faculty, many of whom teach in the evening program.

7. It provides additional income (through fees) to the college which can be used in many different ways, such as supporting computer services, buying equipment, supporting certain administrative activities, etc.

Changes in the present arrangements which impinge on any of the above would be viewed as a serious and drastic matter by the local colleges.

There are many reasons to believe that this aspect of the Board's educational program will continue to grow: competitive cost of education, national trends, colleges entrepreneurship, local needs, etc.

An important study on continuing education was issued by the Massachusetts Advisory Council on Education in September, 1973. While valuable as an overview of all continuing education activities in the state, it does not bring into focus exactly how the community colleges operate their evening division activities, the problems and opportunities associated with the program, and other details which could be valuable to the Board in policy making.

"Related education services" is meant to cover such activities as providing GED certificates, assisting part-time students in preparing for entry into credit-granting educational programs, educational counseling, and other such activities.

The pattern of activity and volume differs from campus to campus, but clearly this is also an important community college role.

The funding of "related educational services"

would appear also to vary from campus to campus. To the extent that this activity is carried on at the expense of other programs--and this is not clear at this time--some recognition should be given to this activity in budgeting and policy-making decisions.

Planning recommendation no. 1

An articulated view of the evening division and other related educational services should be produced as part of the revised master plan.

This articulation should be carried out in collaboration with local college representatives who should also participate in the study design.

The study itself might deal with at least the following matters:

1. the nature, size, and distribution of continuing education and related educational services;
2. organizational patterns used to carry out the programs;
3. location and impact of programs on physical resources;
4. a financial profile of the programs, including sources of income and distribution;
5. present constraints on the effectiveness of the programs as seen locally and system-wide; and
6. recommendations for strengthening and improving the programs.

The above topics are illustrative only, and the first phase of a revised master plan study, as suggested, would be a more definitive study design of just how best to keep an accurate account of the number of people directly involved in community college activities.

TABLE ONE

TOTAL ESTIMATED POPULATION (Head count)

COLLEGE	DAY - Spring '75 Students Head count	Students FTE	Faculty Head count	Faculty* FTE	Admin.	Clerical	Maint.	CONTINUING EDUCATION (Head count) Students Head count Spring'75	Students Head count Summer'74	Faculty/ Admin. (Spring'75	FT/PT Clerical and/or Summer'74)	FT/PT Maint.	TOTAL
BERKSHIRE	1,523	1,382	94	85	22	29	30	1,125	539	41	4	—	3,407
BRISTOL	1,789	1,733	102	94	21	26	33	3,308	882	68	8	1	6,239
BUNKER HILL	2,108	2,060	108	103.5	17	31	16	1,807	———	54	5	—	4,146
CAPE COD	1,655	1,583	111	98	20	22	21	1,925	943	147**	8	—	4,852
GREENFIELD	1,358	1,255	89	82	15	23	25	1,057	210	56**	5	—	2,838
HOLYOKE	2,543	2,393	170	145.5	22	47	53	1,660	792	124**	8	—	5,419
MASS BAY	1,556	1,529	102	90	27	25	5	1,980	1,416	39***	13	1	5,164
MASSASOIT	1,769	1,766	111	106	19	24	15	2,725	1,957	84	7	1	6,712
MIDDLESEX	1,190	1,156	80	66.5	11	15	11	3,901	1,462	36	1	—	6,707
MT. WACHUSETT	1,208	1,134	72	66	19	24	29	1,234	555	40	4	—	3,185
NORTH SHORE	2,124	2,072	112	110.5	28	28	12	3,803	1,625	73	9	2	7,816
NORTHERN ESSEX	2,371	2,236	134	129.5	28	30	25	3,356	1,616	99	13	12	7,684
QUINSIGAMOND	1,802	1,742	119	111	15	29	35	3,056	2,162	90	1	3	7,312
ROXBURY	796	652	41	37.5	13	8	4	- - -	- - -	- -	- -	- -	862
SPRINGFIELD	3,053	2,981	164	159	21	49	72	3,50	1,521	263*	19	—	8,669
SUB TOTAL	26,846	25,674	1,609	1,484.0	298	410	386	34,444	15,680	1,214	105	20	81,013
CENTRAL OFFICE					15	15							30
TOTAL	26,846	25,674	1,609	1,484.0	313	425	386	34,444	15,680	1,214	105	20	81,043

*Assumed to be 2 PT = 1 FTE
**Lists all 'Day' and adjunct Faculty
***Lists only 'Day' Faculty for Spring '75 'Eve' - i.e. not for Summer '74 and/or others

SOURCE: Central Office, MBRCC, Spring 1975
Bober and Associates, Inc.

2

Item 2

Who are the students?

Demographic profiles of daytime students are kept in various formats at the different colleges. Episodically this information is reported to the central office. A current look at the 1974 student body is shown in Tables 2 and 3. This profile pulls together information from several other tables listed in Appendix B.

In the daytime programs eight out of ten students are between the ages of 18 and 24. An older population is served in the evening and in other educational service programs. Exact figures are not available systemwide.

In the day programs there were about as many males and females enrolled full time, while there were 25 percent more females than males in the part-time student group.

The profile is more indicative than exact in as much as different colleges reported the request for information in varying ways. The material is not fine grained enough to allow any analysis of how successful the colleges are as a whole in providing access to the many constituencies for which the colleges were founded. See also Item 10.

Some colleges or the communities administer a standard inquiry form to all students enrolling, such as the College Entrance Examination Board's Comparative Guidance and Placement Program. Some variation of this kind of student profile (such as the one recently proposed by the central office) would be most useful.

Comparable information should be made available for the evening division and for those obtaining other educational services.

Planning recommendation no. 2

A basic demographic profile should be generated locally at the individual colleges, using a uniform format at all institutions for all students enrolled in all programs.

This information should be summarized and reported semi-annually to the central office and annually to the Board.

TABLE TWO A

STUDENT PROFILE

	% AGE DISTRIBUTION						% ETHNIC DISTRIBUTION												% COMMUTING DISTANCES							
	18-24		25-30		Over 30		Black		Hisp. Am.		Native Am.		Franco Am.		Asian Am.		Other		Under 10 mi.		11-15 mi.		16-20 mi.		Over 20 mi.	
	D	E	D	E	D	E	D	E	D	E	D	E	D	E	D	E	D	E	D	E	D	E	D	E	D	E
Berkshire	80	80	12	12	8	8	2	2	1	1	0	0	0	0	0	0	97	97	67	67	11	12	9	8	13	13
Bristol	86	10	7	30	7	60	5	3	1	2	34	30	25	31	1	1	34	31	51	58	27	8	9	21	13	7
Bunker Hill	76	-	8	-	16	-	1	-	-	-	1	-	-	-	2	-	96	-	93	-	5	-	2	-	0	-
Cape Code	86	-	10	-	4	-	1	-	1	-	-	-	-	-	-	-	98	-	55	-	25	-	0	-	20	-
Greenfield	74	-	16	-	10	-	-	-	-	-	-	-	-	-	-	-	100	-	62	-	3	-	8	-	27	-
Holyoke	91	-	4	-	5	-	3	-	2	-	0	-	26	-	2	-	67	-	57	-	29	-	10	-	4	-
Mass. Bay	85	-	12	-	3	-	2	-	-	-	-	-	-	-	-	-	98	-	30	-	45	-	20	-	5	-
Massasoit	80	-	10	-	10	-	1	-	-	-	-	-	-	-	-	-	1	-	51	56	25	22	19	15	5	7
Middlesex	NA																									
Mt. Wachusett	88	-	7	-	5	-	-	-	-	-	99	-	-	-	-	-	-	-	35	36	22	27	21	20	22	16
North Shore	85	27	8	45	7	28	3	2	3	2	-	-	-	-	-	-	94	96	82	74	13	13	5	9	0	4
North Essex	70	40	20	30	10	30	1	-	1	-	1	-	-	-	5	-	92	-	40	45	40	35	10	10	10	10
Quinsigamond	76	-	11	-	13	-	1	-	-	-	99	-	-	-	-	-	-	-	56	53	13	16	12	15	19	16
Roxbury	NA																									
Springfield	80	43	8	54	13	3	7	4	4	-	-	-	-	-	-	-	89	96	80	-	11	-	3	-	6	-

Source: Central Office, Massachusetts Board of Regional Community Colleges
Student Profiles 1975

Dober and Associates, Inc.

TABLE TWO B

STUDENT PROFILE

	M	F	Residency		
			Instate	Out-of-State	Foreign
	%	%	%	%	%
Berkshire	53	47	96	3	1
Bristol	50	50	93	6	1
Bunker Hill	52	48	98	-	2
Cape Cod	46	54	99	-	2
Greenfield	48	52	93	7	-
Holyoke	51	49	98	2	-
Mass Bay	41	59	98	1	1
Massasoit	54	46	100	-	-
Middlesex	40	60	100	-	-
Mt. Wachusetts	56	44	96	3	1
North Shore	48	52	100	-	-
Northern Essex	50	50	93	7	-
Quinsigamond	45	55	98	-	2
Roxbury	30	70	93	-	7
Springfield	54	46	95	4	1
Average	48	52	97	2	1

Day Division Information available only.
Source: Enrollment Data - Fall 1974
Dober and Associates, Inc.

TABLE THREE

STUDENT ENROLLMENT DATA

Table Three A - Student Enrollments, Summer 1974

Tables Three B - Day and Evening Students, Fall 1974
- Table Three B1 - Application Information
- Table Three B2 - Enrollment Data for Day Division by Sex and Attendance Status
- Table Three B3 - Enrollment of Students by Residence for Day Division plus the Number of Veterans Attending Community Colleges
- Table Three B4 - Enrollment of Students by Curriculum for Day Division
- Table Three B5 - Enrollment Data on Students Attending Evening Division

Tables Three C - Day and Evening Students, Spring 1975
- Table Three C1 - Application Information
- Table Three C2 - Enrollment Data for Day Division by Sex and Attendance Status
- Table Three C3 - Enrollment of Students by Residence for Day Division plus the Number of Veterans Attending Community Colleges
- Table Three C4 - Enrollment of Students by Curriculum for Day Division
- Table Three C5 - Enrollment Data on Students Attending Evening Division

TABLE THREE A

ENROLLMENTS - SUMMER SESSION, 1974

COMMUNITY COLLEGE	TRANSFER STUDENTS			OCCUPATIONAL STUDENTS			OTHER STUDENTS			TOTAL NUMBER OF STUDENTS			TOTAL NUMBER OF COURSE REGISTRATIONS		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Berkshire	75	49	124	26	43	69	131	215	346	232	307	539	336	350	686
Bristol	179	138	317	264	261	525	19	21	40	462	420	882	529	536	1065
Cape Cod	235	482	717	75	132	207	6	13	19	316	627	943	377	755	1132
Greenfield	78	81	159	31	20	51	-	-	-	109	101	210	158	130	288
Holyoke	211	184	395	196	201	397	-	-	-	407	385	792	493	463	956
Massachusetts Bay	657	538	1195	74	147	221	-	-	-	731	685	1416	1043	870	1913
Massasoit	585	818	1403	281	125	406	47	101	148	913	1044	1957	1059	1247	2306
Middlesex	564	575	1139	146	128	274	9	40	49	719	743	1462	1007	1041	2048
Mount Wachusett	120	102	222	180	153	333	-	-	-	300	255	555	339	276	615
North Shore	579	441	1020	280	176	456	80	69	149	939	686	1625	1032	936	1968
Northern Essex	544	445	989	264	215	479	81	67	148	889	727	1616	1050	861	1911
Quinsigamond	623	757	1380	352	430	782	-	-	-	975	1187	2162	1201	1455	2656
Springfield Technical	830	691	1521	-	-	-	-	-	-	830	691	1521	1646	1098	2744
Total	5280	5301	10581	2169	2031	4200	373	526	899	7822	7858	15680	10270	10018	20288

Source: Central Office, MBRCC Dober and Associates, Inc.

TABLE THREE B1

DAY STUDENTS, FALL 1974

	BERKSHIRE	BRISTOL	BUNKER HILL	CAPE COD	GREENFIELD	HOLYOKE	MASSACHUSETTS BAY	MASSASOIT	MIDDLESEX	MOUNT WACHUSETT	NORTH SHORE	NORTHERN ESSEX	QUINSIGAMOND	ROXBURY	SPRINGFIELD TECHNICAL	TOTAL
REQUESTS FOR ADMISSION																
Freshmen	1151	1991	2210	1740	1095	2257	2317	2204	1840	1033	2733	2350	2355	663	2959	28898
Sophomores	287	6	-	92	88	73	240	-	20	183	117	101	71	-	12	1290
Unclassified	-	-	75	-	88	11	42	5	11	-	-	-	18	-	109	359
Total	1438	1997	2285	1832	1271	2341	2599	2209	1871	1216	2850	2451	2444	663	3080	30547
QUALIFIED APPLICANTS																
Freshmen	1151	1991	2179	1740	1019	2144	2177	1534	1838	1001	2392	1681	1943	487	2959	26236
Sophomores	287	6	-	92	87	69	220	-	19	183	117	92	59	-	12	1243
Unclassified	-	-	75	-	88	11	-	5	11	-	..	..	18	-	109	317
Total	1438	1997	2254	1832	1194	2224	2397	1539	1868	1184	2509	1773	2020	487	3080	27796
NOTIFIED OF ADMISSION																
Freshmen	1128	1472	2135	1450	932	2144	1524	1534	1140	1001	2221	1681	1781	465	2959	23567
Sophomores	169	6	-	70	87	69	201	-	19	183	117	92	54	-	12	1079
Unclassified	-	-	75	-	87	11	-	5	11	-	-	-	18	-	109	316
Total	1297	1478	2210	1520	1106	2224	1725	1539	1170	1184	2338	1773	1853	465	3080	24962

TABLE THREE B2

DAY STUDENTS, FALL 1974

	BERKSHIRE	BRISTOL	BUNKER HILL	CAPE COD	GREENFIELD	HOLYOKE	MASSACHUSETTS BAY	MASSASOIT	MIDDLESEX	MOUNT WACHUSETT	NORTH SHORE	NORTHERN ESSEX	QUINSIGAMOND	ROXBURY	SPRINGFIELD TECH.	TOTAL
FULL-TIME MALE STUDENTS																
Freshmen	449	505	595	436	389	866	479	524	238	389	670	621	556	84	1146	7947
Sophomores	231	343	485	241	189	337	254	456	221	255	409	421	288	53	571	4754
Unclassified	10	-	-	-	17	35	-	-	-	-	-	-	-	-	42	104
Total	690	848	1080	677	595	1238	733	980	459	644	1079	1042	844	137	1759	12805
FULL-TIME FEMALE STUDENTS																
Freshmen	377	485	647	513	415	837	673	474	418	311	696	648	692	193	1030	8409
Sophomores	211	324	273	281	181	287	371	342	252	164	476	410	295	123	431	4421
Unclassified	9	-	-	-	17	22	-	-	-	-	-	-	-	-	28	76
Total	597	809	920	794	613	1146	1044	816	670	475	1172	1058	987	316	1489	12906
PART-TIME MALE STUDENTS																
Freshmen	90	30	-	-	59	72	-	3	19	49	-	126	19	33	7	507
Sophomores	31	36	-	-	27	44	-	4	15	31	-	85	19	14	26	332
Unclassified	9	-	20	57	21	15	5	3	3	-	-	-	10	-	18	161
Total	130	66	20	57	107	131	5	10	37	80	-	211	48	47	51	1000
PART-TIME FEMALE STUDENTS																
Freshmen	83	39	-	-	95	137	-	7	53	67	-	127	24	75	30	737
Sophomores	40	58	-	-	24	43	-	5	22	27	-	84	54	30	4	391
Unclassified	7	-	80	51	40	15	9	2	8	-	-	-	8	-	44	264
Total	130	97	80	51	159	195	9	14	83	94	-	211	86	105	78	1392
HEAD COUNT ENROLLMENT																
Freshmen	999	1059	1242	949	958	1912	1152	1008	728	816	1366	1522	1291	385	2289	17676
Sophomores	513	761	758	522	421	711	625	807	510	477	885	1000	656	220	955	9821
Unclassified	35	-	100	108	95	87	14	5	11	-	-	-	18	-	133	606
Total	1547	1820	2100	1579	1474	2710	1791	1820	1249	1293	2251	2522	1965	605	3377	28103
FTE ENROLLMENT																
Freshmen	931	1035	1242	949	895	1849	1152	1003	706	724	1366	1417	1275	345	2180	17139
Sophomores	489	731	758	522	402	681	625	803	503	477	885	931	635	203	1006	9651
Unclassified	29	-	50	49	62	75	6	2	4	-	-	-	4	-	91	372
Total	1449	1766	2050	1520	1359	2605	1783	1808	1213	1271	2251	2348	1914	548	3277	27162

TABLE THREE B3

DAY STUDENTS, FALL 1974

	BERKSHIRE	BRISTOL	BUNKER HILL	CAPE COD	GREENFIELD	HOLYOKE	MASSACHUSETTS BAY	MASSASOIT	MIDDLESEX	MOUNT WACHUSETT	NORTH SHORE	NORTHERN ESSEX	QUINSIGAMOND	ROXBURY	SPRINGFIELD TECHNICAL	TOTAL
MASSACHUSETTS RESIDENTS																
Freshmen	950	992	1236	940	886	1867	1131	1008	728	785	1354	1394	1261	360	2164	17056
Sophomores	497	707	728	520	395	703	619	807	510	461	882	946	647	201	906	9529
Unclassified	35	-	100	108	89	87	14	5	11		-	-	17	-	127	593
Total	1482	1699	2064	1568	1370	2657	1764	1820	1249	1246	2236	2340	1925	561	3197	27178
RESIDENTS OF OTHER STATES																
Freshmen	36	56	1	9	65	39	13	-	-	25	7	127	8	1	107	494
Sophomores	12	44	-	2	26	4	-	-	-	12	2	54	-	-	42	198
Unclassified	-	-	-	-	6	-	-	-	-	-	-		1	-	3	10
Total	48	100	1	11	97	43	13	-	-	37	9	181	9	1	152	702
FOREIGN STUDENTS																
Freshmen	13	11	5	-	7	6	8	-	-	6	5	1	22	24	18	126
Sophomores	4	10	30	-	-	4	6	-	-	4	1	-	9	19	7	94
Unclassified	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3
Total	17	21	35	-	7	10	14	-	-	10	6	1	31	43	28	223
VETERANS																
Freshmen	96	130	217	53	145	268	32	101	'52	78	132	208	102	42	214	1870
Sophomores	48	111	-	78	47	99	33	84	37	86	97	138	62	28	103	1051
Unclassified	8	-	-	-	18	12	-	-	-	-	-	-	1	-	15	54
Total	152	241	217	131	210	379	65	185	89	164	229	346	165	70	332	2975

TABLE THREE B4

DAY STUDENTS, FALL 1974

Community College	TOTAL NUMBER OF TRANSFER STUDENTS			TOTAL NUMBER OF GENERAL EDUCATION STUDENTS			TOTAL NUMBER OF CAREER STUDENTS			ENROLLMENTS IN CAREER PROGRAMS												
										Bus. - Sec.			Engr. - Tech.			Health			Service		
	Freshmen	Sophomores	Total	Freshmen	Sophomores	Total	Freshmen	Sophomores	Total	Freshmen	Sophomores	Total	Freshmen	Sophomores	Total	Freshmen	Sophomores	Total	Freshmen	Sophomores	Total
BERKSHIRE	209	156	365	394	150	544	396	242	638	164	62	226	30	7	37	88	100	188	114	73	187
BRISTOL	420	316	736	-	-	-	639	445	1084	225	151	376	141	69	210	162	140	302	111	85	196
BUNKER HILL	506	345	851	-	-	-	736	513	1249	331	156	487	-	-	-	20	56	76	385	301	686
CAPE COD	557	370	927	2	82	84	390	178	568	223	107	330	-	-	-	117	55	172	50	16	66
GREENFIELD	403	95	498	92	3	95	617	264	881	193	72	265	70	38	108	110	48	158	244	106	350
HOLYOKE	778	300	1078	2	2	4	1114	514	1628	581	260	841	48	21	69	193	90	283	292	143	435
MASSACHUSETTS BAY	425	342	767	140	-	140	587	297	884	441	223	664	-	-	-	103	55	158	43	19	62
MASSASOIT	335	333	668	-	-	-	673	479	1152	322	204	526	56	26	82	70	78	143	225	171	396
MIDDLESEX	234	200	434	139	110	249	355	211	566	171	104	275	-	-	-	160	97	257	24	10	34
MOUNT WACHUSETT	154	102	256	260	121	381	402	254	656	170	101	271	46	15	61	78	67	145	108	71	179
NORTH SHORE	561	328	889	82	14	96	722	544	1266	309	169	478	101	57	158	164	212	376	148	106	254
NORTHERN ESSEX	713	570	1283	181	29	210	628	401	1029	407	232	639	71	33	104	107	111	218	43	25	68
QUINSIGAMOND	821	370	1191	53	9	62	417	295	712	157	101	258	40	24	64	195	147	342	25	23	48
ROXBURY	286	180	466	50	-	50	49	40	89	18	16	34	-	-	-	11	8	19	20	16	36
SPRINGFIELD TECHNICAL	341	98	439	514	68	582	1508	848	2356	475	274	749	347	216	563	374	200	574	312	158	470
TOTAL	6743	4105	10848	1909	588	2497	9233	6525	14758	4187	2232	6419	950	506	1456	1952	1464	3416	2144	1323	3467

TABLE THREE B5

EVENING STUDENTS, FALL 1974

Community College	NUMBER OF STUDENTS ENROLLED IN EVENING DIVISION					NUMBER OF COURSE REGISTRATIONS IN EVENING DIVISION				
	Transfer Program	Occupational Program	Community Service Program	Other	Total	Transfer Program	Occupational Program	Community Service Program	Other	Total
BERKSHIRE	83	51	251	668	1053	987	245	254	—	1486
BRISTOL	317	1320	1272	—	2909	551	2196	2184	—	4931
BUNKER HILL	367	511	—	350	1228	538	864	50	404	1856
CAPE COD	1087	691	179	300	2257	1339	860	192	300	2691
GREENFIELD	174	302	700	—	1176	269	358	725	—	1352
HOLYOKE	559	838	144	51	1592	905	1307	144	51	2407
MASSACHUSETTS BAY	736	1228	11	—	1975	962	2073	11	—	3046
MASSASOIT	1146	796	325	—	2267	2004	1200	325	—	3529
MIDDLESEX	1611	1418	245	500	3774	2256	1985	257	500	4998
MOUNT WACHUSETT	610	914	—	—	1524	818	1228	—	—	2046
NORTH SHORE	1378	1193	1246	200	4017	1929	2203	1611	200	5943
NORTHERN ESSEX	1141	1177	882	—	3200	1556	1613	1206	—	4375
QUINSIGAMOND	1303	1121	263	—	2687	1957	1684	395	—	4036
SPRINGFIELD TECH.	[illegible]	1969	425	—	2610	413	3820	1700	—	5933
TOTAL	10,728	13,529	5,943	2069	32,269	16,484	21,636	9,054	1455	48,629

TABLE THREE C1

DAY STUDENTS, SPRING 1975

	BERKSHIRE	BRISTOL	BUNKER HILL	CAPE COD	GREENFIELD	HOLYOKE	MASSACHUSETTS BAY	MASSASOIT	MIDDLESEX	MOUNT WACHUSETT	NORTH SHORE	NORTHERN ESSEX	QUINSIGAMOND	ROXBURY	SPRINGFIELD TECHNICAL	TOTAL
REQUESTS FOR ADMISSION																
Freshmen	339	397	552	562	228	442	202	264	282	201	305	561	402	565	423	5725
Sophomores	68	12	17	43	33	69	-	-	-	45	64	218	10	-	8	587
Unclassified	12	-	49	-	59	12	-	-	-	-	-	-	45	-	149	326
Total	419	409	618	605	320	523	202	264	282	246	369	779	457	565	580	6638
QUALIFIED APPLICANTS																
Freshmen	339	397	545	542	218	427	180	261	270	201	290	515	328	488	423	5424
Sophomores	68	12	17	43	30	67	-	-	-	45	64	206	7	-	8	567
Unclassified	12	-	49	-	52	11	-	-	-	-	-	-	45	-	149	318
Total	419	409	611	585	300	505	180	261	270	246	354	721	380	488	580	6309
NOTIFIED OF ADMISSION																
Freshmen	283	288	523	497	196	427	155	241	233	201	290	515	328	488	423	5088
Sophomores	58	12	17	43	25	67	-	-	-	45	64	206	7	-	8	552
Unclassified	10	-	49	-	49	11	-	-	-	-	-	-	45	-	149	313
Total	351	300	589	540	270	505	155	241	233	246	354	721	380	488	580	5953

TABLE THREE C2

DAY STUDENTS, SPRING 1975

	BERKSHIRE	BRISTOL	BUNKER HILL	CAPE COD	GREENFIELD	HOLYOKE	MASS. BAY	MASSASOTT	MIDDLESEX	MT. WACHUSETT	NORTH SHORE	NORTHERN ESSEX	QUINSIGAMOND	ROXBURY	SPRINGFIELD TECH	TOTAL
FULL-TIME MALE STUDENTS																
Freshmen	338	502	737	497	356	756	396	617	257	403	536	605	491	170	943	7604
Sophomores	249	326	382	239	162	356	220	381	145	195	463	403	274	19	511	4325
Unclassified	13	-	-	-	15	51	-	-	1	-	2	-	-	-	106	188
Total	600	828	1119	736	533	1163	616	998	403	598	1001	1008	765	189	1560	12117
FULL-TIME FEMALE STUDENTS																
Freshmen	327	486	645	503	358	678	539	471	437	301	504	635	570	232	922	7608
Sophomores	219	310	244	277	198	300	308	294	236	118	520	388	335	44	414	4205
Unclassified	4	-	-	-	18	23	-	-	2	-	2	-	-	-	48	97
Total	550	796	889	780	574	1001	847	765	675	419	1026	1023	905	276	1384	11910
PART-TIME MALE STUDENTS																
Freshmen	107	28	-	-	63	88	8	1	27	65	-	100	25	163	12	687
Sophomores	70	36	-	-	24	47	11	-	14	19	-	73	11	9	8	322
Unclassified	12	-	28	80	27	27	12	-	-	-	47	-	21		27	281
Total	189	64	28	80	114	162	31	1	41	84	47	173	57	172	47	1290
PART-TIME FEMALE STUDENTS																
Freshmen	106	41	-	-	70	155	15	5	40	68	-	99	38	150	17	804
Sophomores	69	61	-	-	31	43	32	-	25	39	-	68	15	9	4	396
Unclassified	9	-	72	59	36	19	15	-	6	-	50	-	22	-	41	329
Total	184	102	72	59	137	217	62	5	71	107	50	167	75	159	62	1529
HEAD COUNT ENROLLMENT																
Freshmen	878	1057	1382	1000	847	1677	958	1094	761	837	1040	1439	1124	715	1894	16703
Sophomores	607	733	626	516	415	746	571	675	420	371	983	932	635	81	937	9248
Unclassified	38	-	100	139	96	120	27	-	9	-	101	-	43	-	222	895
Total	1523	1790	2108	1655	1358	2543	1556	1769	1190	1208	2124	2371	1802	796	3053	26846
FTE ENROLLMENT																
Freshmen	788	1034	1382	1000	798	1579	952	1091	740	783	1040	1358	1100	548	1874	16063
Sophomores	564	699	626	516	395	713	559	675	409	351	983	878	626	104	928	9026
Unclassified	30	-	52	67	66	101	18	-	7	-	49	-	16	-	179	585
Total	1382	1733	2060	1583	1255	2393	1529	1766	1156	1134	2072	2236	1742	652	2981	25674

TABLE THREE C3

DAY STUDENTS, SPRING 1975

	BERKSHIRE	BRISTOL	BUNKER HILL	CAPE COD	GREENFIELD	HOLYOKE	MASSACHUSETTS BAY	MASSASOIT	MIDDLESEX	MOUNT WACHUSETT	NORTH SHORE	NORTHERN ESSEX	QUINSIGAMOND	ROXBURY	SPRINGFIELD TECH.	TOTAL
MASSACHUSETTS RESIDENTS																
Freshmen	809	999	1380	986	792	1638	941	1092	761	810	1035	1191	1082	662	1798	15976
Sophomores	569	683	612	511	387	742	567	675	420	357	977	983	626	75	860	9044
Unclassified	38	—	100	—	89	117	27	—	9	—	101	—	43	-	212	736
Total	1416	1682	2092	1497	1268	2497	1535	1767	1190	1167	2113	2174	1751	737	2870	25756
RESIDENTS OF OTHER STATES																
Freshmen	53	47	1	13	47	31	6	—	—	21	4	107	7	5	89	431
Sophomores	29	40	-	5	28	3	1	—	—	10	5	90	-	-	60	271
Unclassified	—	—	-	-	6	-	-	—	—	-	-	—	-	-	8	14
Total	82	87	1	18	81	34	7	—	—	31	9	197	7	5	157	716
FOREIGN STUDENTS																
Freshmen	16	11	1	1	8	8	11	2	—	6	1	—	35	39	15	154
Sophomores	9	10	14	-	-	1	3	-	—	4	1	—	9	15	9	75
Unclassified	—	—	—	-	1	3	—	-	—	-	-	—	-	-	2	6
Total	25	21	15	1	9	12	14	2	—	10	2	—	44	54	26	235
VETERANS																
Freshmen	117	173	265	70	136	316	32	137	69	143	139	212	158	49	179	2195
Sophomores	55	120	97	90	54	140	32	82	29	70	127	196	42	30	76	1240
Unclassified	11	—	—	—	16	23	—	—	—	—	1	—	—	-	58	109
Total	183	293	362	160	206	479	64	219	98	213	267	408	200	79	313	3544

24

TABLE THREE C4

DAY STUDENTS, SPRING 1975

	TOTAL NUMBER OF TRANSFER STUDENTS				TOTAL NUMBER OF GENERAL EDUCATION STUDENTS				TOTAL NUMBER OF CAREER STUDENTS				ENROLLMENTS IN CAREER PROGRAMS															
													Bus.—Sec.				Engr.—Tech.				Health				Service			
	Freshmen	Sophomores	Unclassified	Total	Freshmen	Sophomores	Unclassified	Total	Freshmen	Sophomores	Unclassified	Total	Freshmen	Sophomores	Unclassified	Total	Freshmen	Sophomores	Unclassified	Total	Freshmen	Sophomores	Unclassified	Total	Freshmen	Sophomores	Unclassified	Total
BERKSHIRE	139	131	8	278	486	239	17	742	253	237	13	503	107	78		185	17	23	3	43	75	103	10	188	54	33		87
BRISTOL	490	337		827	-	-		-	567	396		963	206	142		348	117	42		159	149	132		281	95	80		175
BUNKER HILL	594	248	42	884	-	-		-	788	378	58	1224	337	132	1	470	-	-		-	22	2	49	73	429	244	8	681
CAPE COD	692	328	113	1133	-	10		10	308	178	26	512	209	99	9	317	-	-		-	52	61		113	47	18	17	82
GREENFIELD	340	133		473	88	8		96	507	282		789	167	71		238	56	35		91	68	70		138	216	106		322
HOLYOKE	695	272	54	1021	6	2		8	984	471	59	1514	495	245	39	779	30	26	2	58	176	81	10	267	283	119	8	410
MASS. BAY	412	306	18	736	67	-		67	479	265	9	753	354	196	9	559	-	-		-	67	53		120	58	16		74
MASSASOIT	392	274		666	-	-		-	702	401		1103	338	151		489	58	20		78	80	70		150	226	160		386
MIDDLESEX	329	171	4	504	123	61	4	188	309	188	1	498	156	87	1	244	-	-		-	139	92		231	14	9		23
MT. WACHUSETT	154	78		232	274	81		355	409	212		621	163	83		246	34	15		49	101	62		163	111	52		163
NORTH SHORE	442	364	4	810	84	24	97	205	514	595		1109	214	168		382	51	37		88	101	248		349	148	142		290
NORTHERN ESSEX	643	502		1145	234	32		266	562	398		960	387	231		618	58	32		90	81	108		189	36	27		63
QUINSIGAMOND	754	358	43	1155	26	4		30	344	273		617	123	83		206	29	26		55	169	141		310	23	23		46
ROXBURY	678	40		718	-	-		-	28	50		78	13	4		17	-	-		-	-	-		-	15	46		61
SPRINGFIELD T.	243	140		383	565	73		638	1306	726		2032	451	230		681	254	179		433	348	182		530	253	135		388
T O T A L	6997	3682	286	10965	1953	534	118	2605	8060	5050	166	13276	3720	2000	59	5779	704	435	5	1144	1628	1405	69	3102	2008	1210	33	3251

TABLE THREE C5

EVENING STUDENTS, SPRING 1975

	NUMBER OF STUDENTS ENROLLED IN EVENING DIVISION				NUMBER OF COURSE REGISTRATIONS IN EVENING DIVISION			
	TRANSFER PROGRAM	OCCUPATIONAL PROGRAM	COMMUNITY SERVICE PROGRAM	TOTAL	TRANSFER PROGRAM	OCCUPATIONAL PROGRAM	COMMUNITY SERVICE PROGRAM	TOTAL
BERKSHIRE	970	62	93	1125	1063	253	326	1642
BRISTOL	324	1536	1448	3308	623	2558	2088	5269
BUNKER HILL	457	722	628	1807	882	1127	655	2664
CAPE COD	746	969	210	1925	923	1312	221	2456
GREENFIELD	150	406	501	1057	210	529	530	1269
HOLYOKE	533	811	316	1660	965	1375	316	2656
MASSACHUSETTS BAY	824	1077	79	1980	1157	1931	84	3172
MASSASOIT	1389	855	481	2725	2328	1443	481	4252
MIDDLESEX	1575	1346	980	3901	2205	1885	1031	5121
MOUNT WACHUSETT	512	722	—	1234	762	1070	—	1832
NORTH SHORE	1460	1268	1075	3803	2045	2429	1383	5857
NORTHERN ESSEX	1381	1249	726	3356	1934	1748	1016	4698
QUINSIGAMOND	1446	1329	281	3056	2161	1987	419	4567
SPRINGFIELD TECHNICAL	265	2471	771	3507	497	4844	3084	8425
TOTAL	12,032	14,823	7,589	34444	17,755	24,491	11,634	53890

3

Item 3

Who are the faculty?

The number of faculty in the day, evening, summer, and other educational programs in spring 1975 is shown in Table 4.

Specific information is more readily available for the day program than for the other programs.

Total head count of day faculty in spring 1975 was 1,609. Of this number, 250 were part-time faculty (16 percent). See Table 4.

Assuming two part-time faculty equal one full-time faculty, the full-time faculty equivalent is 1,484.

For the 25,674 full-time equivalent students in spring 1975, the mean student-to-faculty ratio was 17.2:1, as is the median.

The student-to-faculty ratios (FTE) range from 15.3 at Greenfield to 19.9 at Bunker Hill.

Approximately 761 daytime faculty also teach or administer in the evening and summer divisions, for which they get additional compensation.

A demographic profile of the faculty--day, evening, summer, and other--is not available. Such information would be useful regarding qualifications, age, sex, length of service, tenure, and rank.

Such information might also be useful for projection purposes.

Planning recommendation no. 3

A demographic profile should be created for all faculty locally and reported in summary fashion to the central office annually in a format that allows comparisons and evaluations to be made among the colleges and for the system as a whole.

This information should be included in the revised master plan study.

TABLE FOUR

SPRING 1975: FACULTY DISTRIBUTION

	Full-time Faculty 01, 02	Part-time Faculty 01, 02	Total Faculty Head count	Assumed* Faculty FTE	FTE Students	FTE Student Per Faculty Head count	FTE Student Per Assumed Faculty FTE
BERKSHIRE	76	18	94	85	1,382	14.7:1	16.3:1
BRISTOL	86	16	102	94	1,733	17.0:1	18.4:1
BUNKER HILL	99	9	108	103.5	2,060	19.1:1	19.9:1
CAPE COD	85	26	111	98	1,583	14.3:1	16.2:1
GREENFIELD	75	14	89	82	1,255	14.1:1	15.3:1
HOLYOKE	121	49	170	145.5	2,393	14.1:1	16.4:1
MASS BAY	78	24	102	90	1,529	15.0:1	17.0:1
MASSASOIT	101	10	111	106	1,766	16.0:1	16.7:1
MIDDLESEX	53	27	80	66.5	1,156	14.4:1	17.4:1
MT. WACHUSETT	60	12	72	66	1,134	15.8:1	17.2:1
NORTH SHORE	109	3	112	110.5	2,072	18.5:1	18.8:1
NORTHERN ESSEX	125	9	134	129.5	2,236	16.7:1	17.3:1
QUINSIGAMOND	103	16	119	111	1,742	14.6:1	15.7:1
ROXBURY	34	7	41	37.5	652	15.9:1	17.4:1
SPRINGFIELD	154	10	164	159	2,981	18.2:1	18.7:1
TOTAL	1,359	250	1,609	1,484.0	25,674	mean 15.9:1 med. 15.8:1	mean 17.2:1 med. 17.2:1

*We have assumed 2 P.T. = 1 F.T. Faculty

SOURCE: Number Teaching Positions - Personnel Dept., Central Office, Spring 1975
FTE Student Enrollment - Table 2 - MBRCC Enrollment figures, Spring 1975
Dober and Associates, Inc.

4

Item 4

What do the faculty do?

Obviously they teach and have collateral duties. Information is readily available only on the first of these.

In the fall of 1974 approximately 1,500 teaching faculty in the day division taught 400,000 credit hours.

Each average (meaning statistically approximate) faculty member was thus providing about 266 credit hours of instruction. See Table 5.

This is slightly less than an assumed full-time credit hour load of 270 hours (which is derived by multiplying an 18:1 student-to-teacher ratio and a course load of 15 credit hours per student).

The differences can be explained--although we have no statistical evidence--by the fact that certain technical and health science courses have student-to-faculty ratios which are lower than 18:1.

Other than these general figures, there is only limited information on how faculty time is actually used, and there is no information on how they employ their time outside the classroom on behalf of the college.

A faculty activity survey is under consideration by the central office. This would provide the demographic information as well as identify faculty teaching patterns.

The study should be extended, however, to also cover activities outside the classroom. A format such as that being developed at the University of Massachusetts (Amherst) might be considered.

It is vital to a successful public debate on financing higher education that the system and the individual colleges take the lead in establishing a constructive method of reporting their activities.

Planning recommendation no. 4

A faculty activity report format should be established in a format appropriate to the community colleges' particular role in higher education.

This format should be used to carry out a faculty activity study.

The study should be conducted annually.

The results of the first study should be included in the revised master plan.

TABLE FIVE

TOTAL ENROLLMENTS AND CREDIT HOURS BY COLLEGE. FY 1975

	Actual Fall '74 Credit Hrs. A	Actual Fall '74 Com Col FTE B	Budgeted Students C
Berkshire	21,810	1,449	1,500
Bristol	26,269	1,766	1,750
Bunker Hill	30,044	2,050	1,800
Cape Cod	24,268	1,520	1,500
Greenfield	18,979	1,359	1,300
Holyoke	37,791	2,605	2,440
Mass. Bay	24,990	1,783	1,700
Massasoit	27,883	1,808	1,750
Mt. Wachusett	18,597	1,271	1,300
Middlesex	16,670	1,213	1,175
North Shore	31,750	2,251	2,000
Northern Essex	33,431	2,348	2,375
Quinsigamond	28,059	1,914	1,750
Roxbury	8,880	548	750
Springfield	47,294	3,277	3,000
TOTALS	396,715	27,162	26,100

5

Item 5

How many people are involved in supporting staff roles?

Supporting staff here means all non-faculty personnel: administrators, maintenance, and clerical people. See Tables 6, 7, and 8.

In the spring of 1975 there were 1,094 non-faculty personnel supporting an FTE student enrollment of 25,674 students.

Some faculty budgeted positions were used for administrative positions. These are counted in the overall staff figures, as provided by the central office, and have not been counted as faculty positions in our earlier comments about the size of the faculty.

The student-to-staff ratio for the colleges as a whole in 1974 was 23.74:1.

Inquiries to the National Center for Educational Statistics (June, 1975) indicated that the national average for two-year public institutions in 1970 was 24.36:1.

There are extreme variations in the staffing pattern among the Massachusetts community colleges.

Board policy presently identifies the type of position and salary range but not staff-to-student ratios, and these are set only for the day division.

Of readily available information, Table 6 shows the distribution of administrative positions by title in 1974.

Only general information is available about the supporting staff situation in the evening, summer, and other educational programs.

In the evening program one notes that a large number of students are being served by a very small supporting staff.

Qualitative and quantitative questions arise from an examination of supporting staff data.

Why are there extreme variations among the institutions?

If the evening division is an important educational activity, is it being properly staffed?

Should the Board have more articulated policies with reference to number and type of staff positions and salary levels?

Planning recommendation no. 5

A more clearly defined staff-to-student ratio should be established by type of staff and by position.

These ratios should be used in projecting staff requirements in the revised master plan.

A comprehensive picture of all supporting staff for all divisions and educational services should be constructed as part of the revised master plan.

TABLE SIX

ADMINISTRATIVE POSITIONS

COLLEGE	President	Assistant to President	Dean Community College	Dean of Students	Librarian	Assistant Librarian	Dean of Faculty	Director of Admissions	Dean of Admissions	Registrar	Director of Counseling	Business Manager	Guidance Counselors	Director of Placement	Staff Assistant (719)	Director of Physical Education and Athletics	Financial Aid Officer	Director Institutional Media	Superintendent Buildings and Grounds	Project Director of MBRCC	Division Chairman	Staff Associate (768)	Health Care Counselor	Director of Data Processing	Placement Officer	Staff Associate (781)	Assistant to Dean	Assistant Registrar	TOTAL
BERKSHIRE	1	1		1	1	1	1	1	1	1			2		4			1	1		2			1	1	1			22
BRISTOL	1			1		4	1	1	1	1		1	4		4			1	1										21
BUNKER HILL	1	1		1	1	1	1	1	1	1	1	1	2	1	1		1		1				1						17
CAPE COD	1		1	1	1	1	1	1	1	1		1	6		2			1											20
GREENFIELD	1		1	1	1	1	1	1					2	1	3		1						1						15
HOLYOKE	1			1	1	2	1	1	2			1	4		7		1									1			22
MASS BAY	1	1		1	1	2	1	1					6		7	1			1		1			1		1			27
MASSASOIT	1	1		1	1	1	1		1	2		1	4		2		1		1				1						19
MIDDLESEX	1			3	1	1	1			1			2											1					11
MT. WACHUSETT	1			1	1	1	1		1				7		3	1			1					1					19
NORTH SHORE	1	1		1	1	3	1	1		1	1	1	4		1		1	1		1	3	2				2			28
NORTHERN ESSEX	1	1		1	1	1	1			1	1	1	7	1	3	1	1	1	1		6		1	1			2		26
QUINSIGAMOND	1			1	1	1				1	1	1	2		1		1	1	1										15
ROXBURY	1	1		1	1	1	1	1		1		1	1	1	2									1				1	13
SPRINGFIELD	1	1			1	1	1	1	1				4		6		1		1										21
TOTALS	15	8	6	16	13	21	15	12	11	12	3	8	57	4	46	3	8	6	10	1	12	2	4	5	1	2	4	1	306

SOURCE: Personnel Department, Central Office - Spring 1975

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TABLE SEVEN

CLASSIFIED PERSONNEL

College	Number Maintenance	Number Clerical	Classified Personnel
BERKSHIRE	30	29	59
BRISTOL	33	26	59
BUNKER HILL	16	31	47
CAPE COD	21	22	43
GREENFIELD	25	23	48
HOLYOKE	53	47	100
MASS BAY	5	25	30
MASSASOIT	15	24	39
MIDDLESEX	11	15	26
MT. WACHUSETT	29	24	53
NORTH SHORE	12	28	40
NORTHERN ESSEX	28	31	59
QUINSIGAMOND	35	29	64
ROXBURY	4	8	12
SPRINGFIELD	72	49	121
TOTAL	389	411	800

SOURCE: Data given by Personnel Dept., Central Office, MBRCC, Spring 1975
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TABLE EIGHT

STUDENT, ADMINISTRATION AND STAFF RATIOS

COLLEGE	FTE Students	Number Administration Positions	FTE Students Per Admin. Positions	Number Maintenance 01, 02 Positions	FTE Students Per Maintenance Positions	Number Clerical 01, 02 Positions	FTE Students Per Clerical Positions	Total Support Staff Positions	FTE Student Per Support Staff Positions
BERKSHIRE	1,382	22	62.8:1	30	46.1:1	29	47.7:1	81	17.1:1
BRISTOL	1,733	21	82.5:1	33	52.5:1	26	66.7:1	80	20.7:1
BUNKER HILL	2,060	17	121.2:1	16	128.8:1	31	66.5:1	64	32.2:1
CAPE COD	1,583	20	79.2:1	21	75.4:1	22	72.0:1	63	25.1:1
GREENFIELD	1,255	15	90.3:1	25	50.2:1	23	54.6:1	63	19.9:1
HOLYOKE	2,393	22	108.8:1	53	45.2:1	47	50.9:1	122	19.6:1
MASS BAY	1,529	27	56.6:1	5	305.8:1	25	61.2:1	57	26.8:1
MASSASOIT	1,766	19	92.4:1	15	117.7:1	24	73.6:1	58	30.4:1
MIDDLESEX	1,156	11	105.1:1	11	105.1:1	15	77.1:1	37	31.2:1
MT. WACHUSETT	1,134	19	59.7:1	29	39.1:1	24	47.3:1	72	15.8:1
NORTH SHORE	2,072	28	74.0:1	25	82.9:1	30	69.1:1	83	25.0:1
NORTHERN ESSEX	2,236	28	79.9:1	12	186.3:1	28	79.9:1	68	32.9:1
QUINSIGAMOND	1,742	15	116.1:1	35	49.8:1	29	60.1:1	79	22.1:1
ROXBURY	652	13	50.2:1	4	163.0:1	8	81.5:1	25	26.1:1
SPRINGFIELD	2,981	21	142.0:1	72	41.4:1	49	60.8:1	142	21.0:1
TOTAL	25,674	298	mean 88.1:1 med. 82.5:1	386	mean 99.3:1 med. 75.4:1	410	mean 64.6:1 med. 66.5:1	1,094	mean 24.4:1 med. 25.0:1

SOURCE: Number Administrative, Maintenance and Clerical Positions, Personnel Department, Central Office - Spring 1975
FTE Student Enrollment - Table 2 MBRCC Enrollment Figures - Spring 1975

6

Item 6

What share of the Massachusetts higher education enrollments do the community colleges now represent? What share will they have in the future?

Table 9 indicates that the community colleges have 35.2 percent of the public enrollments in higher education in 1974-1975 and 16.1 percent of all enrollments in that period.

These figures were prepared by the Board of Higher Education, which has the responsibility for coordinating educational activities in the Commonwealth.

The Board of Higher Education indicates that the community colleges may have an increase of approximately 5,000 students by 1980, with a slight increase in the percentage share of the public sector and a small decrease in the overall enrollments.

For the revised master plan the total probable size of the colleges and the system should be projected.

Size here refers to all population groups: students, faculty, staff, and others.

Size is one way of describing the volume of educational activity.

Information on size is useful in making budgets and personnel decisions and in creating physical resources.

Size in the master plan should be expressed in two ways: existing conditions and projections.

Most of the information now available for planning purposes on size deals with daytime programs. Only fragmented information is available about the evening programs and about other educational and service activities carried on by the colleges and the system.

Non-day activities (of all kinds) make demands on resources. The obscure aspects of their size thus need to be clarified.

Another aspect of size is the distribution of people by program category. Again the daytime information is more extensive than that of the evening program.

In dealing with size, the master plan should address the question of student-faculty and student-staff ratios for all aspects of the college population.

Where possible, Board policy should be established, so that colleges can make their personnel requests in light of program and service objectives in these projections.

Planning recommendation no. 6

Two kinds of information are thus needed in the master plan: a better accounting of the present situation and some forecasting of the probable future size.

The first area can be covered by inquiry to the colleges and by using the proposed management information studies (discussed later).

Because they reflect cost differences, finer grain projections are needed on career programs particularly.

A good start on future plans has been made with the five-year program plans which the individual units have recently submitted to the central office.

These program plans will need further explication, refinement, and coordination.

Because many community college programs are job-oriented, some longer range economic forecasting will be needed beyond the five-year plan. This might best be done by the state's own planning division or by those responsible for manpower activities at the state level.

Such a study needs to have its results clearly focused on the community colleges if the forecasts are to be useful.

Because of recent changes in the Board of Higher Education, the relationship these plans will have to statewide public education planning will also need clarification.

Parenthetically, present constraints on long-range planning need to be recognized, especially the financial condition of the state and the effect this condition may have on any plans that assume growth in enrollments and in programs.

The question of the size of the individual colleges needs further discussion, especially in light of the rising cost or personal transportation, and impact on commuting distances.

The question of size is a central issue in long-range planning.

TABLE NINE

COLLEGE ENROLLMENT PROJECTIONS: ALL UNDERGRADUATE STUDENTS

	INSTITUTIONAL TYPES										
	PUBLIC					PRIVATE					
	2 Year	4 Year	Univ.	Subtotal	% of 2 Yr/Public Subtotal	2 Year	4 Year	Univ.	Subtotal	Total	% 2 Yr/Public Total
1974-75*	41,035	38,497	36,856	116,388	35.2%	16,196	50,306	73,283	139,785	256,173	16.1%
1979-80	46,894	42,943	40,425	130,262	36.0%	20,703	59,422	89,172	169,297	299,559	15.7%
1982-83	49,674	45,090	42,337	137,101	36.2%	21,816	62,255	93,833	177,904	315,005	15.8%
1984-85	48,390	42,739	39,800	130,929	37.0%	20,911	58,598	89,547	169,056	299,985	16.1%
1989-90	48,519	41,878	38,722	129,119	37.6%	20,684	57,072	88,257	166,013	295,132	16.4%

* Actual HEGIS reported enrollments

SOURCE: MASSACHUSETTS BOARD OF HIGHER ED. 1975

37

7

Item 7

What programs and educational services are now being offered?

Table 3 shows the distribution of students in the day division by program.

In the spring of 1975, 45 percent of the head count students were enrolled in career programs, 41 percent were enrolled in transfer programs, and 10 percent were enrolled in general education programs.

In the career program 44 percent of the students were enrolled in business, 24 percent in service, 23 percent in health sciences, and 9 percent in engineering.

Table 10 shows some of the changing trends in enrollment for the period of 1967 to 1974.

Transfer programs show a drop from a 46 percent share of the enrollment to 36 percent in that period, with general education dropping from 10 percent to 9 percent. Enrollments in career programs rose from 44 percent to 59 percent.

Table 11 shows the mix of all programs at all colleges for fall 1974. There are great variations in the percentage mix--probably due to location, the image the college has in its community, counseling at the secondary and college level, and communication among students about course content.

It would be instructive to track student preferences and their causes, and this might be done on a sampling basis at several of the colleges having an interest in institutional research.

Good information is available on the changing percentage of enrollments in the career programs for the years 1967 to 1974. These extensive lists are not reprinted here.

Systemwide comparable accounting is not being made of evening programs and other educational services.

Planning recommendation no. 7

Information comparable to that of the day division should be kept on evening programs and other educational services, so as to yield a fuller picture systemwide of the colleges' educational activities.

TABLE TEN

COMMUNITY COLLEGE PROGRAM ENROLLMENT-HEAD COUNT (Fall, 1967 to Fall, 1974)

PROGRAM	Fall, 1967		Fall, 1970		Fall, 1974		%-Age Change 1967-1970	%-Age Change 1970-1974
	#	%	#	%	#	%		
OCCUPATIONAL EDUCATION	5094	100.00	8469	100.00	16536	100.00	66.0	95.25
a. Business	3480	68.32	3996	47.18	8143	49.24	14.8	103.78
b. Health	476	9.34	1678	19.82	3368	20.37	252.5	100.72
c. Eng'r/Tech.	998	19.59	1783	21.05	1688	10.21	78.7	- 5.33
d. Service	140	2.75	1012	11.95	3337	20.18	622.9	229.74
LIBERAL ARTS TRANSFER.	5360		8659		8996		53.8	3.89

RELATIONSHIP OF OCCUPATIONAL EDUCATION AND LIBERAL ARTS TRANSFER PROGRAM ENROLLMENTS

OCCUPATIONAL EDUCATION	5094	47.5	8469	49.4	16,536	64.77	66.0	95.25
LIBERAL ARTS TRANSFER	5360	52.5	8659	50.6	8,996	35.23	53.8	3.89
	10,454	100.0	17,128	100.0	25,532	100.00		

RELATIONSHIP OF OCCUPATIONAL EDUCATION, GENERAL EDUCATION, AND LIBERAL ARTS TRANSFER PROGRAM ENROLLMENTS

Occupational Education	5094	43.8	8469	44.8	16,536	58.84	66.0	95.25
Liberal Arts Transfer	5360	46.1	8659	45.8	8996	32.01	53.8	3.89
General Education	1165	10.1	1783	9.4	2571	9.15	53.0	44.20
	11,619	100.0	18,911	100.0	28,103	100.00		

SOURCE: Massachusetts Board of Regional Community Colleges, December, 1974
Dober and Associates, Inc.

39

TABLE ELEVEN

RELATIONSHIP OF LIBERAL ARTS TRANSFER, GENERAL EDUCATION, AND OCCUPATIONAL EDUCATION STUDENTS ENROLLMENTS, FALL 1974

COLLEGE	TOTAL ENROLLMENT	RANKING	SYSTEM %	LIB. ARTS TRANSFER #	LIB. ARTS TRANSFER %	EDUCATION #	EDUCATION %	EDUCATION #	EDUCATION %
Berkshire	1547	11	5.50	241	15.58	544	35.16	762	4926
Bristol	1820	7	6.48	617	33.90	-	-	1203	66.10
Bunker Hill	2100	5	7.47	806	38.38	74	3.52	1220	58.10
Cape Cod	1579	10	5.61	799	50.60	84	5.32	696	44.07
Greenfield	1474	12	5.24	498	33.79	95	6.45	881	59.77
Holyoke	2710	2	9.64	1020	37.64	4	.0015	1686	62.21
Mass. Bay	1791	9	6.33	460	25.68	140	7.82	1191	66.50
Massasoit	1820	8	6.48	597	32.80	-	-	1223	67.20
Middlesex	1249	14	4.44	310	24.82	249	19.94	690	55.24
Mt. Wachusett	1293	13	4.60	166	12.84	381	29.47	746	57.70
North Shore	2251	4	8.00	713	31.67	96	4.26	1442	64.06
Northern Essex	2522	3	8.98	1123	44.53	210	8.33	1189	47.
Quinsigamond	1965	6	7.00	853	43.40	62	3.16	1050	53.44
Roxbury	605	15	2.15	403	66.61	50	8.26	152	25.12
Springfield Tech.	3377	1	12.01	390	11.55	582	17.23	2405	71.21
	28103	120	100.00	8996	32.01	2571	9.15	16,536	58.84

SOURCE: Massachusetts Board of Regional Community Colleges, December 1974

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40

8

Item 8

What programs are being planned for the future?

The central office has launched an extensive program-planning activity involving each of the colleges.

The objective is to identify local concerns, estimate changes in program mix, avoid redundancy, and provide a more comprehensive view of program planning than that now available.

The first results of the study indicate that if all desired programs were carried out, there would be 435 program changes in the coming five years.

Fifty percent of these would be in the health sciences and engineering fields.

These are among the more costly and space-consuming programs. The implications on financing, faculty recruitment, and capital construction are self-evidently important.

Programs are the fuel for expansion, change, and growth. Thus a clear understanding of the program changes in the next five years will help clarify policies and priorities for development.

It should be noted that conversations in the field indicate that some individual institutions have taken on a claim-staking role in reporting their program desires. Thus the 435 programs may be viewed as a utopian figure.

One dampening effect of program expansion is the cost of starting the programs. One of the community colleges has costed out the manpower requirements for preparing and implementing the various procedures associated with getting approval for a new program. They calculated $17,000 per program. Informed opinion has suggested that this is a reasonable estimate.

Two hundred new programs in the next five years--a figure we arbitrarily select for discussion purposes--would thus imply a $3.5 million investment in manpower resources.

Whatever the actual "cost," the fiscal constraints of launching new programs need recognition in any planning process.

New programs require approval by the Board of Higher Education. At this writing there is no specific information available as to where current requests by the colleges now stand in that external process.

Program planning, especially that which is tied to the state employment picture, cannot be done at a local level, say some of the community college presidents. They call for a statewide manpower planning study focused on community college interests, abilities, and resources.

The whole issue, then, of program planning needs careful re-examination, so that the good work now begun can be continued in a way that will be responsive to some of the issues raised above.

41

Planning recommendation no. 8

Program planning procedures should be reviewed, refined, and strengthened, so that revised projections can be incorporated in the master plan.

9 Item 9

What level of achievement have the colleges reached?

Site inspections and discussions with the presidents and central office indicate many of the colleges are involved in adventuresome, productive educational activities in formal, structured, sequential programs and in less formal programs.

Degrees and certificates are at present the only available benchmarks for measuring the overall effectiveness of the system.

Table 12 shows the growth in degrees from 1962 to 1974--from 33 to 6,528.

A total of 33,106 degrees have been granted in the 13-year period.

Table 13 shows the most recent graduation figures, including degrees and certificates.

Planning recommendation no. 9

The system would benefit if some form of accounting of all educational achievements were established, so that progress and productivity could be measured and assessed annually.

TABLE TWELVE

ASSOCIATE DEGREES CONFERRED BY MASSACHUSETTS COMMUNITY COLLEGES FROM 1962 TO 1974

COMMUNITY COLLEGE	1962	1964	1966	1968	1970	1972	1974	TOTAL
Berkshire	32	61	118	150	216	290	355	2340
Bristol				72	304	426	509	2365
Cape Cod		71	83	117	150	224	360	1873
Greenfield		48	57	117	212	276	368	1981
Holyoke			182	274	403	544	684	3863
Massachusetts Bay		104	177	290	323	349	451	3264
Massasoit				137	325	432	571	2523
Middlesex						149	256	635
Mount Wachusett			74	175	181	247	299	1760
Northern Essex		82	117	270	284	340	486	2903
North Shore				219	332	613	649	3213
Quinsigamond			104	196	257	395	620	2789
Springfield Technical	___	___	___	112	366	643	920	3597
Total	32	366	912	2129	3353	4928	6528	33106

Source: Massachusetts Board Regional College
Dober and Associates, Inc.

43

TABLE THIRTEEN

DEGREES AND CERTIFICATES GRANTED, 1975

COLLEGE	Transfer	Career	Subtotal	Certificates	Total
BERKSHIRE	238	214	452	2	454
BRISTOL	185	376	561	21	582
BUNKER HILL	100	220	320	11	331
CAPE COD	256	116	372	0	372
GREENFIELD	127	222	349	2	351
HOLYOKE	336	323	659	7	666
MASS BAY	150	301	451	22	473
MASSASOIT	214	461	675	11	686
MIDDLESEX	209	178	387	58	445
MT. WACHUSETT	49	279	328	0	328
NORTH SHORE	219	507	726	0	726
NORTHERN ESSEX	182	233	415	3	418
QUINSIGAMOND	243	348	591	0	591
ROXBURY	48	0	48	0	48
SPRINGFIELD	152	796	948	96	1,044
TOTAL	2,708	4,574	7,282	233	7,515

SOURCE: Central Office, MBRCC, Spring 1975

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44

10

Item 10

How accessible are the community colleges to lower income groups?

Some information is available to make an estimate about how successful the community colleges are in reaching out to the lower income groups enrolled in the Day Division.

A Harvard University Task Force on Higher Education reported the percentages of 19 to 24 year old enrolled in 1973-1974 as follows:

Family Income	Percentage Enrolled
$ 0 to $ 5,999	12.4
$ 6,000 to $ 8,999	16.1
$ 9,000 to $11,999	19.9
$12,000 plus	19.3

Information gathered by the central office for 12 of the 15 colleges indicates that 21 percent of the enrollments in 1973-1974 were students from families with income of $6,000 or less.

See Tables 14 and 15.

The percentage of students enrolled from lower income groups is higher than the percentage of those groups attending college.

The percentages at the individual colleges vary considerably, however, with Cape Cod reporting 34 percent of its students coming from families with income of $6,000 or less. Mount Wachusett and Quinsigamond reported 10 percent of such students in 1974-1975.

As noted in Tables 14 and 15, some studies have been done by the colleges as to accessibility by race and sex. A review of the information indicates it is inadequate for thoughtful analysis.

The same survey identified commuting patterns, as measured by driving distance. The survey did not ask for specific information on commuting distances beyond 20 miles, so comparisons with suggested criteria in the Deyo report--30 miles or 45 minutes of driving time--are not possible.

Unquestionably an important measure of the effectiveness of the colleges and the system is the accessibility it has for the people it was established to serve.

At least three forms of accessibility might be examined: geographic, time, and program preference.

The geographic approach would examine the question of who the colleges are serving. This survey can be handled by taking a sampling of student addresses and seeing how these are distributed by census tracts, which themselves reflect income and ethnic characteristics in the college's service zone. The match of enrollments to geographic social/economic areas could be illuminating.

Space utilization patterns will help reveal

the pattern of accessibility, as measured by time. A sampling technique could also address the question as to whether or not educational opportunities are being shut out by having programs scheduled at hours that are not convenient to some students. Assumed here is the observation that some students have family and other responsibilities which preclude their enrollment in the more conventional time periods.

Program preference issues can also be handled by a sampling. Are there a significant number of students shut out of preferred programs? If so, why? What policies can overcome such problems that may exist?

Planning recommendation no. 10

The question of accessibility needs first to be carefully defined and then study techniques established to measure this important guage of educational effectiveness.

TABLE FOURTEEN

ACCESSIBILITY FACTORS 1973-74

	BERKSHIRE	BRISTOL	BUNKER HILL	CAPE COD	GREENFIELD	HOLYOKE	MASS BAY	MASSASOIT	MIDDLESEX	MOUNT WACHUSETT	NORTH SHORE	NORTHERN ESSEX	QUINSIGAMOND	ROXBURY	SPRINGFIELD TECHNICAL	WESTERN MEAN
Fall 1973 Enrollment	1321	1657	1007	1403	1310	2181	1577	1786	1038	1107	2199	2204	1758	327	3202	1605
Distribution of Family Income (In Percentages)														—DATA NOT AVAILABLE—		
(a) Lower than $3,000	6%	32%	10%	19%	3%	6%	4%	2%	4%	—	7%	8%	3%		DATA NOT AVAILABLE	8%
(b) $ 3,000 - 4,000	4%	34%	19%			4%	4%	4%	7%	3%	5%	9%	4%			8%
(c) 4,001 - 6,000	4%			15%	7%	4%	5%	2%	9%	7%	6%	9%	7%			5%
(d) 6,001 - 7,500	6%	9%	24%	10%	8%	7%	13%	5%	12%	8%	8%	9%	9%			10%
(e) 7,501 - 10,000	19%	11%	17%	9%	10%	22%	19%	19%	29%	28%	19%	20%	25%			19%
(f) 10,001 - 12,000	9%	7%	16%	15%	22%	24%	15%	19%	13%	12%	19%	15%	15%			15%
(g) 12,001 - 15,000	19%	6%	11%	16%	49%	18%	19%	12%	12%	26%	28%	20%	11%			17%
(h) over $15,000	33%	1%	3%	15%		15%	21%	37%	14%	16%	18%	10%	14%			17%
Distribution of June 1973 Graduates																
(a) Percentage who transferred to other institutions of higher education	53%	40%	-	38%	45%	56%	52.4%	63%	38%	41%	44%	-	42%		27%	45%
(b) Percentage who found employment in areas trained	NOT AVAIL-	42%	-	33%	NOT	38%	24.2%	35%	49%	46%	39%	-	54%		65%	43%
(c) Other	ABLE	-	-	27%	AVAIL- ABLE	6%	23.2%	2%	13%	13%	17%	-	4%		8%	12%

Source: Board of Regional Community Colleges
Dober and Associates, Inc.

47

TABLE FIFTEEN

ACCESSIBILITY FACTORS 1974-75

	BERKSHIRE	BRISTOL	BUNKER HILL	CAPE COD	GREENFIELD	HOLYOKE	MASS BAY	MASSASOIT	MIDDLESEX	MOUNT WACHUSETT	NORTH SHORE	NORTHERN ESSEX	QUINSIGAMOND	ROXBURY	SPRINGFIELD TECHNICAL	WESTERN MASS
Fall 1974 Enrollment	1449	1766	2030	1520	1359	2605	1783	1808	1213	1271	2251	2348	2924	548	3277	1810
Distribution of Family Income (In Percentages)		DATA NOT AVAILABLE												-DATA NOT AVAILABLE-	DATA NOT AVAILABLE	
(a) Lower than $3,000	5%		11%	19%	9%	6%	4%	4%	6%	3%	7%	8%	3%			8%
(b) $ 3,000 - 4,000	3%		15%			5%	3%	4%	8%	3%	5%	9%	3%			6%
(c) 4,001 - 6,000	4%		-	15%	12%	6%	6%	4%	10%	4%	5%	9%	4%			5%
(d) 6,001 - 7,500	5%		10%	10%	9%	8%	12%	7%	9%	5%	7%	9%	6%			8%
(e) 7,501 - 10,000	20%		9%	9%	9%	13%	18%	16%	27%	24%	19%	20%	22%			18%
(f) 10,001 - 12,500	9%		23%	13%	16%	14%	18%	17%	15%	13%	21%	15%	17%			16%
(g) 12,001 - 15,000	19%		15%	16%	43%	18%	14%	15%	13%	28%	28%	20%	10%			18%
(h) over $15,000	35%		17%	15%		26%	21%	41%	12%	20%	8%	10%	18%			20%
Distribution of June 1974 Graduates																
(a) Percentage who transferred to other institutions of higher education	52%	38%	-	38%	46.7%	48%	52.2%	43%	33%	33%	42%	65%	40%		34%	44%
(b) Percentage who found employment in areas trained	NOT AVAIL-ABLE	32%	-	37%	NOT AVAIL-ABLE	47%	27.5%	51%	46%	45%	38%	35%	53%		64%	43%
(c) Other		-	-	25%		5%	20.3%	6%	18%	22%	20%	0%	7%		2%	13%

Source: Board of Regional Community Colleges
Baker and Associates, Inc.

48

11

Item 11

How many students have gone on to other higher education institutions?

An exact number is not known because some students drop out of college for a time and may resume their education at a later date.

One significant figure is known: 45 percent of the students graduating last year (1974) indicated plans to continue in higher education in the fall of 1974.

This factor is of some importance to higher education planning in the Commonwealth in general if the community colleges continue to be feeder schools to the upper divisions in four-year colleges and universities.

First, the community college enrollments become a strong demographic planning factor in projecting enrollments.

Second, the community colleges may set certain educational examples which the other institutions might benefit from.

This last point needs explication and understanding.

A number of the community colleges are heavily committed to non-contentional teaching/learning methods. The success of these methods has been demonstrated in competency examinations and other testing techniques as well as in student motivation.

The educational achievements of students who have had this educational experience and have left the community colleges to undertake more conventional course work approaches should be of great interest to all concerned with higher education.

The content, organizational patterns, costs, and benefits of these non-traditional educational approaches should be made more visible and, if appropriate, the techniques extended.

Planning recommendation no. 11

The Board should encourage a group of community colleges committed to non-traditional instruction to form a self-study group to identify and evaluate the efficacy of their programs with the view of having them extended wherever possible.

The self-study probably could be funded by foundation or federal grants.

12

Item 12

How much land and buildings has the Board developed to date?

The Board now owns 4.1 million square feet of building space and about 1500 acres of land. See Table 16. To date $241 million has been expended.

Nine of the fifteen colleges have new campuses constructed to the specifications established by the Board.

Three campuses are on acquired sites that are or will combine older buildings and new facilities: Massachusetts Bay, Quinsigamond and Springfield.

Three campuses use interim facilities and are scheduled to obtain new campuses and facilities. These are: Middlesex, North Shore and Roxbury.

Bristol and Mass Bay are presently using both an interim site and a permanent site. Table 16 shows the distribution of campus by functional categories at those institutions where information was readily available.

Approximately one-third of the space is used for scheduled teaching purposes; i.e., classrooms and laboratories. The total gross square feet is estimated to be 4.1 million or approximately 150 gross square feet per student, 1975 enrollment day program.

Again, because of historic conditions, variations from college to college are extreme with Springfield having 285 gross square feet per student and North Shore, 44.

The Deyo Report indicated that about 135 to 150 square feet per student would represent a reasonable target for facility planning.

Using the lower number and the information shown in Table 16, statistically there is room for 3,129 additional day FTE students in the system as a whole. The following colleges are not yet at capacity: Berkshire, Bristol, Cape Cod, Greenfield, Mount Wachusett, Northern Essex, Quinsigamond and Springfield.

Two of the nine, however, carry older and obsolete space in their inventory, (Quinsigamond and Springfield) and thus qualitative factors need to be introduced in judging their capacity to accommodate additional students.

The estimated capacity figures should be taken as crude approximations (Table 16), as a more proper analysis would indicate capacity by each functional space type.

We have not been able to carry out a more thorough study of the physical facilities because some of the information provided does not conform to general experience, and thus raises questions about the validity of the information, which we have not had time to check.

For example, Northern Essex, Quinsigamond, and Springfield report net to gross ratios of 91, 93 and 91 percent, respectively. These are

unusually high figures based on national norms. In addition, our physical inspection of the buildings during our visits suggests to us the figures are not correct. See Table 16 for an approximate distribution of net to gross figures for all colleges reporting space information.

Discussions on campus and site visits indicate that conventional approaches to space planning at some institutions will not be helpful in describing or predicting space needs.

For example, audio-tutorial labs, learning centers, informal self-paced study areas, all these are educational spaces which do surface in statistical tables--and to some institutions these spaces are as important as the traditional classroom and laboratory.

A more descriptive method of defining the functional spaces is needed.

Finally, the evening programs and other educational service programs need to be accounted for in any space planning analysis.

Information on their particular space needs, if any, is missing.

Appendix B shows the presently articulated capital improvement priorities at the individual colleges. These should be reviewed as part of the revised master plan.

Planning recommendation no. 12

The revised master plan should include a more elaborate display of physical plant information than that now available, particularly an analysis of the amount of space by function per student.

The revised plan should also take into consideration the impact proposed shifts in programs will have on facility development. There is some evidence that the student mix is moving towards career and occupational programs, which may in turn require a different ratio of classroom and laboratory space in the future.

The space requirements of all educational programs need further examination and review.

51

TABLE SIXTEEN

FACILITIES INVENTORY: SQUARE FEET

COLLEGE	(1) Land In Acres	(2) Total Classroom	(3) Total Lab	(4) Total Office	(5) Total Study	(6) Total Special	(7) Total General	(8) Total Support	(9) Total Health	(10) Total Resid.	(11) Total NASF*	(12) Gross	(13) FTE Student	(14) NET PER FTE	(15) GROSS PER FTE	(16) Estimated Capacity at 135 GSF/Per Student	(17) Capacity Minus Actual
BERKSHIRE	179	29,770	22,421	26,007	10,596	23,183	23,969	8,230	1,426	0	145,602	236,998	1,449	100	164	1,755	306
BRISTOL	102	32,798	53,808	40,052	22,636	5,432	20,981	21.440	0	0	197,147	279,065	1,766	112	158	2,067	301
BUNKER HILL	50	21,058	27,495	36,434	4,215	1,916	21,157	1,445	144	0	113,864	276,552	2,050	56	135	2,048	-2
CAPE COD	116	23,993	19,380	24,772	13,506	19,548	20,361	8,873	0	0	130,433	240,239	1,520	86	158	1,780	260
GREENFIELD	93	——	——	——	——	——	——	——	-	-	NA	225,000	1,339	—	166	1,667	308
HOLYOKE	135	31,195	33,733	41,467	23,197	4,615	19,172	7,370	0	0	183,130	324,647	2,605	70	125	2,405	-200
MASS BAY	83	25,894	25,350	19,969	10,763	16,216	34,895	10,705	304	1,340	178,549	240,909	1,808	99	133	1,785	-23
MASSASOIT	100	19,170	27,269	17,165	14,700	1,746	37,629	7,709	286	0	125,674	178,076	1,783	70	100	1,319	-464
MIDDLESEX	—	19,045	11,716	10,217	3,588	589	6,280	1,925	0	0	57,920	86,220	1,213	48	71	638	-575
MT. WACHUSETT	272	——	——	——	——	—	——	——	-	-	152,000	232,000	1,271	120	183	1,719	448
NORTH SHORE	91	15,351	11,032	17,637	4,224	-	5,123	3,102	0	0	56,489	98,485	2,251	25	44	730	-1,521
NORTHERN ESSEX	111	64,099	34,996	34,444	75,321	29,664	29,242	18,349	1,918	0	297,678	328,352	2,348	127	140	2,432	84
QUINSIGAMOND	57	36,785	16,836	28,573	14,037	29,923	33,497	23,688	0	0	295,480	316,850	1,914	154	166	2,347	433
ROXBURY	—	——	——	——	——	——	——	——	—	—	63,652	75,000	683	93	109	535	128
SPRINGFIELD	40	96,918	102,947	71,678	46,731	99,400	87,880	41,150	1,736	7,150	849,652	934,617	3,277	259	285	6,923	3,646
TOTAL	1,429	416,076	407,023	368,413	243,514	232,232	341,186	153,986	5,814	8,490	2,847,270	4,073,010	27,297	104	149	30,170	3,139

*Includes inactive area, alteration area

SOURCE: HEGIS Reports, Fall 1974
Deber and Associates, Inc.

52

TABLE SEVENTEEN

1974 HEGIS FACILITIES INVENTORY: Proportional Distribution: Percent NSF

COLLEGE	Classroom	Lab	Office	Study	Special	General	Support	Health	Residential	Unclassified	Net/Gross Ratio
BERKSHIRE	20	15	18	7	16	16	6	1	0	0	61
BRISTOL	17	27	20	11	3	11	11	0	0	0	71
BUNKER HILL	18	24	32	4	2	19	1	0	0	0	41
CAPE COD	18	15	19	10	15	16	7	0	0	0	54
GREENFIELD*	-	-	-	-	-	-	-	-	-	-	NA
HOLYOKE	17	29	23	13	3	10	4	0	0	1	56
MASSASOIT	15	22	14	12	1	30	6	0	0	0	71
MASS BAY	15	14	11	6	9	20	6	0	1	18	74
MIDDLESEX	33	20	18	6	1	11	3	0	0	8	67
MT. WACHUSETT*	-	-	-	-	-	-	-	-	-	-	66
NORTH SHORE	27	20	31	8	0	9	5	0	0	0	57
NORTHERN ESSEX	21	12	12	25	10	10	6	1	0	3	91
QUINSIGAMOND	12	6	10	5	10	11	8	0	0	38	93
ROXBURY*	-	-	-	-	-	-	-	-	-	-	85
SPRINGFIELD	11	12	8	6	12	10	5	0	1	35	91
SYSTEM WIDE	16	16	14	9	8	13	6	0	0	18	70

*HEGIS Reports Unavailable

SOURCE: HEGIS Reports, Fall 1974

Dober and Associates, Inc.

53

13

Item 13

How is the space used?

Space is an institutional resource whose presence or absence can effect significantly institutional goals and objectives.

HEGIS reports are filed annually by the colleges. They describe the size, distribution, and type of space.

The actual utilization of space is not recorded systematically.

It would be desirable to measure and keep account of space utilization for at least these reasons:

1. to establish priorities in capital funding;
2. to justify operating and maintenance budgets;
3. to help measure "accessibility;"
4. to identify special characteristics of programs, buildings, colleges, or the system as a whole; and
5. to help bring, over a period of time, balance in the availability of physical resources at the individual colleges.

It is both desirable and necessary that the individual institutions have some say in the design of the space utilization study so that the diversity and variety of conditions found in each college might be fairly represented in the study.

A format for space utilization is being designed in collaboration with institutional representatives.

This format will be one of the final products from the present Dober and Associates study.

Planning recommendation no. 13

It is proposed that the format then be used in summer 1975 to measure space utilization as it was in spring 1975.

The results of the space utilization study will then be evaluated, and further changes, if needed, will be made in the utilization format and the summary techniques.

This work would then result in a final set of procedures which would cover all spaces.

If the procedures were accepted and applied, the Board would receive an annual report on space utilization.

An additional expected outcome from the study would be information that will allow the Board, if appropriate, to establish expected utilization standards at the individual institutions.

14

Item 14

How much space is rented?

Table 18 shows the location and rents being paid for day program facilities.

Currently $769,000 is expended for rents.

Mass Bay expects to close down its Watertown campus shortly.

A listing of satellite locations and rents for evening programs and other educational services is not available.

Planning recommendation no. 14

A full account of all properties used by the community colleges for all programs should be included in the physical facilities section of the revised master plan.

TABLE EIGHTEEN

RENTAL PROPERTIES

COLLEGE	Temporary or Supplemental Location	Annual Rental
MASS BAY	Raytheon	$225,000.00
MIDDLESEX	JFK School	1,200.00
	Mariet Fathers	20,000.00
	Veterans Administration	46,600.00
NORTH SHORE	Watch Hill Road	9,000.00
	YMCA	2,880.00
	Eliot Trust	36,000.00
	Sawyer Property	303,520.00 (effective 9/75)
ROXBURY	Little Sisters of the Poor	125,000.00
		$769,200.00

SOURCE: Central Office, MBRCC, Spring 1975

Dober and Associates, Inc.

15

Item 15

How much money was expended in the last fiscal year for all educational activities at the colleges?

Table 19 shows the state appropriations for fiscal year 1975 for 14 of the 15 colleges and six budget areas: $37.9 million.

The largest portion of the budget was expended for instruction (56 percent), followed by maintenance (19 percent), and administration and fiscal analysis (10.5 percent).

Instructional costs varied from 63 percent of the budget at Northern Essex to 52 percent at Mount Wachusett.

Table 20 shows federal funds expended for the period of 1973 to 1974, the last year for which complete figures are available. Federal expenditures were $5.4 million for all the colleges. A significant portion of this money was in the form of student aid.

There is little current information on evening program funding and other funding sources.

Audit reports for the various campuses do not readily reveal the income and expenditure patterns by colleges for comparison purposes.

The audit period varies from college to college, some being eight-month audits, and others covering 14 months.

Tabular material in the audit reports is handled in varying ways.

It would be useful to organize the financial information at each college in a uniform format, so that comparison could be made of all income sources and expenditures for a designated time period.

Planning recommendation no. 15

A comprehensive picture of income and expenditures should be prepared and reported annually.

A total view of expenditures during the last several years should be included in the revised master plan.

57

Central Office, MBRCC, Spring 1975

TABLE NINETEEN

1975 APPROPRIATIONS IN THOUSANDS

INSTRUCTION	LEARNING RESOURCE CENTER	ADMINISTRATION AND FISCAL OPERATIONS	COMPUTER OPERATIONS	STUDENT SERVICES	PLANT MAINTENANCE AND OPERATION	TOTAL	
1272 52.2	142 5.8	297 12.2	68 2.8	218 9.0	439 18.0	2,436	BERKSHIRE
1502 55.8	146 5.4	332 12.3	21 .8	189 7.0	503 18.7	2,693	BRISTOL
1329 52.5	88 3.5	319 12.6	63 2.5	190 7.5	543 21.4	2,532	BUNKER HILL
1440 60.6	95 4.0	218 9.2	42 1.8	225 9.5	354 14.9	2,374	CAPE COD
1184 52.2	97 4.3	228 10.1	35 1.6	181 8.0	529 23.5	2,254	GREENFIELD
2062 54.5	173 4.6	298 7.9	54 1.4	328 8.7	866 22.9	3,781	HOLYOKE
1486 54.9	112 4.1	250 9.2	7 .3	269 9.9	584 21.6	2,708	MASS. BAY
1447 56.0	93 3.6	328 12.7	21 .8	270 10.4	427 16.5	2,586	MASSASOIT
888 57.4	69 4.4	243 15.6	7 .5	138 9.0	203 13.1	1,548	MIDDLESEX
1118 52.1	102 4.8	212 9.9	51 2.4	207 9.6	454 21.2	2,144	MT. WACHUSETT
1967 63.2	102 3.2	240 7.7	75 2.4	230 7.4	500 16.1	3,114	NO. ESSEX
1818 61.4	105 3.5	283 9.6	60 2.0	209 7.0	488 16.5	2,963	NO. SHORE
1659 61.3	92 3.4	243 9.0	27 1.0	206 7.6	479 17.7	2,706	QUINSIGAMOND
Figures not available at time of preparation.							ROXBURY
2300 56.1	92 2.2	491 12.1	174 4.2	208 5.0	839 20.4	4,104	SPRINGFIELD
21,472 (56.6)	1,508 (4.0)	3,982 (10.5)	705 (1.9)	3,068 (8.0)	7,208 (19.0)	37,943	TOTAL (percentages)

TABLE TWENTY

SUMMARY OF FEDERAL AID - FY'74

Source: Central Office, MBRCC

Community College	Community Service and Continuing Education Programs — Title I	Library Resources Program — Title II-A	Supplemental Educational Opportunity Grants Program—Title IV-A, Sec. 401	Basic Educational Opportunity Grants Program—Title IV	College Work-Study Program—Title IV-C	Improvement of Undergraduate Instruction — Title VI	Co-operative Education Programs — Title IV-D	Veterans' Cost-of-Instruction Program — Title X	Omnibus Crime Control & Safe Streets Act — Law Enforcement Program	Law Enforcement Assistance Act—LEEP Internship Program	Public Health Service Act — Nursing Student Loans & Scholarships Programs	Nursing Capitation Grant Program	National Defense Education Act of 1958—Title II, Loans to students	Vocational Education Act	Other Federal Grants	Total Federal Money Received by Community Colleges
Berkshire		5,000	8,294	20,000	47,318		5,000	6,877	5,970		11,200	22,205	3,726	68,840		204,430
Bristol	23,386	5,000	99,564	24,090	108,657			23,111	57,385	2,000	29,363	28,049	15,167	31,734	(a) 140,000	587,506
Bunker Hill				29,575										234,547		264,122
Cape Cod		5,000	17,660	12,570	72,438						16,235		21,445	132,326		277,674
Greenfield		5,000	10,596	6,853	34,951			10,236	13,300				8,173	34,211		123,320
Holyoke	15,388	5,000	9,902	31,710	25,612				39,200	4,550	13,644	20,085	2,626	79,654		247,375
Massachusetts Bay		5,000	38,579	15,000	45,273		15,000	3,839	35,820		23,183		35,937	73,108		290,739
Massasoit		5,000	42,866	10,000	56,936			18,073	18,560	2,500	7,000	33,292		48,210	(b) 5,000	247,437
Middlesex	6,882	5,000	50,070	5,731	36,219			6,770	15,300		7,882	2,219	38,656	180,597		355,326
Mount Wachusett	8,671	5,000	18,689	7,417	21,731				13,532		8,001	7,960	11,713	2,525		105,239
North Shore	51,625	5,000	40,080	23,100	92,380			18,339	42,880	7,500	22,740	31,687	45,034	167,741	(c) 109,420	657,526
Northern Essex		5,000	63,270	66,610	115,901			24,604			18,193	22,742	65,885	62,297		444,506
Quinsigamond		5,000	31,476	18,060	55,219	21,780			29,145		26,680	35,124	9,717	11,850	(d) 608,953	853,004
Roxbury				20,000										282,808		302,808
Springfield Tech.		5,000	35,793	47,190	31,510		9,700	14,687	46,930		26,084	22,584	5,128	274,936		519,542
Total	105,952	65,000	466,839	337,906	744,145	21,780	29,700	126,536	318,022	16,550	210,205	225,951	263,211	1,685,384	863,373	5,480,554

(a) Includes the following grants: under HEA of '65, Title IV-A Special Services $80,000 + Title III, Right to Read Community-Based Project $60,000.
(b) National Science Foundation Grant $5,000. (c) Includes the following grants: under HEA of '65, Title II-B Institute for Training in Librarianship $14,230 + Title IV-A Special Services $60,000; N.S.F. Grant $1,350; Youth Challange Program $3,840; and Public Service Careers $30,000.
(d) Consists of a Title II grant under HEA of '65, Advanced Institutional Development Program $575,000 + Allied Health Training Grant $33,953.

16

Item 16

What were the costs per student per college and per program?

Table 21 shows the cost per budgeted student and cost per full-time equivalent student for fiscal year 1975 and comparison of these costs to fiscal year 1974.

For fiscal year 1975 the FTE cost ranged from $1,235 per student at Bunker Hill to $1,904 at Roxbury.

The budgeted student figure ranged from $1,319 at Middlesex to $1,735 at Roxbury.

More detailed information is available on the various state fiscal accounts per student and per college, as listed in Appendix A.

Comparable information is not available on the evening division or for other educational services.

It would be interesting to compare the costs per student for comparable programs in the evening and day divisions.

Several of the colleges are field testing a Resources Requirement Prediction Model (RRPM), which will produce in finer detail information about enrollments, credit hours, and costs per program.

Application of this model to all the colleges should produce a stronger information base for policy decisions on educational programs.

Planning recommendation no. 16

The RRPM should be extended to all colleges as soon as possible.

Extreme variations in program costs per student should be explained in any public documents.

TABLE TWENTY-ONE

COMMUNITY COLLEGE BUDGET ANALYSIS: 01-16 ACCOUNTS RANKED BY COLLEGE

COLLEGES RANKED BY TOTAL FY75 COST PER BUDGETED STUDENT	TOTAL COST PER BUDGETED STUDENT	PREVIOUS RANK FY74	PER CENT BUDGET CHANGE FY74-75	TOTAL FY75 COST PER FTE	RANKED COST PER FTE	COLLEGES RANKED BY 01, 02, 03 SALARY COSTS PER BUDGETED STUDENT	FY75 01, 02, 03 SALARY COSTS/STUDENT	FY75 01, 02, 03 SALARY COSTS/FTE	RANKED 01, 02, 03 SALARY COST PER FTE
1. Roxbury	$1,735	1	-9%	$1,904	1	1. Cape Cod	$1,383	$1,364	3
2. Mass Bay	1,593	3	4%	1,519	6	2. Quinsigamond	1,379	1,225	8
3. Greenfield	1,591	10	21%	1,581	4	3. Berkshire	1,321	1,367	2
4. Quinsigamond	1,585	6	12%	1,408	9	4. Greenfield	1,314	1,306	5
5. Cape Cod	1,570	5	3%	1,549	5	5. Roxbury	1,314	1,443	1
6. Berkshire	1,557	2	2%	1,612	2	6. Mass Bay	1,313	1,252	6
7. Mt. Wachusett	1,545	11	19%	1,582	3	7. Mt. Wachusett	1,296	1,325	4
8. Holyoke	1,515	14	23%	1,419	8	8. Bristol	1,263	1,252	7
9. North Shore	1,481	13	20%	1,316	12	9. Holyoke	1,262	1,182	9
10. Bristol	1,462	7	4%	1,449	7	10. Massasoit	1,198	1,159	10
11. Massasoit	1,423	8	7%	1,378	10	11. North Shore	1,194	1,061	14
12. Bunker Hill	1,407	4	-8%	1,235	15	12. Springfield	1,192	1,091	12
13. Springfield	1,369	9	4%	1,254	14	13. Bunker Hill	1,166	1,023	15
14. Middlesex	1,319	15	11%	1,278	13	14. Northern Essex	1,145	1,158	11
15. Northern Essex	1,311	12	3%	1,326	11	15. Middlesex	1,100	1,066	13
SYSTEM WIDE COST PER STUDENT	1,478	—	19%	1,412	—		1,247	1,191	—

SOURCE: Budget Analysis, FY'74, FY'75, Central Office, MBRCC

Dober and Associates, Inc.

61

A PLANNING DEFINITION

A Planning Definition

In May 1967, the Massachusetts Board of Regional Community Colleges issued a remarkable document -- a master plan aimed at producing "Access to Quality Community College Opportunity."

The document, prepared by Dr. Donald E. Deyo, was to serve as a basic policy making framework for the Board through 1975.

The Deyo Report set out in a logical form goals and objectives, the status of the colleges in 1965, curriculum descriptions, projected enrollments and priorities, space and capital needs and defined the role of the central office in the system.

Substantial accomplishments have followed the report's publication. There are now fifteen institutions, many housed in impressive new facilities, serving close to a hundred thousand people in an exciting and productive mix of programs and learning modes. Clearly, it was as useful a document as it was comprehensive.

But the Deyo Report -- as any report ten years old would be -- is now out of date. While many of the goals and objectives are still valid, new forces and factors have to be educationally accounted for. The factual base of the document is obsolete. Priorities have changed. Some of the strategies for implementation are no longer applicable.

The tone of decision making is also different now than it was during the years the Deyo plan was formulated and being executed. Higher education today is not being carried forward on waves of optimism. It is struggling for survival -- but not because there is less demand or less need, particularly for the educational services provided by community colleges.

The struggle seems to be one of competition for scarce resources in a changing economy. Many observers believe this competition will continue in the future. Further, that future is likely to be filled with continually changing circumstances, difficult to anticipate.

In this light, what kind of a master plan should be prepared?

One should first acknowledge that in the context of uncertainty the very phrase master plan may be troublesome. It has a sense of finiteness attached to it. Hence the preference for the words planning process which suggests flexibility and choices, as well as an ability to respond quickly to new circumstances. Planning here is conceived as an on-going activity.

Whatever the obstacles of definition, one should acknowledge that even a process must yield, at some point, a set of actions.

Viable planning cannot simply state conditions, define problems, produce options -- it must also shape policy and lead decision making.

In that regard, from time to time it is useful to review the larger picture by asking: Where are we going? Where did we start from? How far have we come? What does it take to get there?

These are the questions that properly can be raised and answered in a revised master plan. There would be no philosophical conflict then between planning as an on-going activity and planning as a summary activity.

What should the Board's revised master planning summary contain?

Plan Contents

The following represents our present recommendations as to what a revised master plan might contain. The listing also illustrates the nature of the planning effort.

1. The purpose of the document
2. A restatement of goals and objectives of the Massachusetts Board of Regional Community Colleges
3. Existing conditions/systemwide
   a. Organizational pattern
   b. Educational services
   c. Profile of enrollment, staffing and other human resources
   d. Financial profile
   e. Physical facilities profile
   f. Recent achievements

11. Contingency plans

12. Sources and acknowledgements

Master Plan Theme

To the extent that a few words and phrases can be descriptive of a complexed activity, it is proposed that the theme for the revised master plan of The Massachusetts Regional Community Colleges be: Planning for Strength and Continuity/Strategies for Action Through the 1980's.

As a word Planning is intended to suggest a continuing process throughout the plan period.

As a word Strength is meant to acknowledge that much has to be done to overcome the difficulties that individual colleges are burdened with -- a lack of physical facilities; shortages in faculty and supporting personnel; disagreement in direction of program areas, inadequate funding.

As a word Continuity implies that the colleges and the system are not starting de novo. They will be building on strengths and the core of agreement that does exist among all concerned with community college education.

As a word Strategies points out that variety, diversity, differences will be recognized in handling the problems and opportunities associated with each college and the system as a whole.

4. Expectations and assumptions for growth
   a. Demographic factors
   b. Programmatic factors
   c. Policy factors
   d. Impact and relationship of plans of other higher education institutions, agencies and boards, public and private

5. Unit profiles

   A description, using a uniform format, of the present status of the individual units. This would include a statistical profile of people, programs, services and facilities.

   This section would also contain a description and evaluation of the present achievements and long-range plans held by the individual institutions.

6. Overview of the above

7. Board priorities for action
   a. Central office
   b. Individual units

8. New policies within existing statutory authority

9. New policies requiring legislative or executive actions

10. Implementation proposals

As a word Action underlines the direction the master planning will take: the acquisition of resources to support the goals and objectives.

1980's suggests a five to ten year time-frame.

In summary, the Board has completed a decade of genuine accomplishments following the goals and objectives laid out in the Deyo Report. A revised master plan -- fact based and achievement oriented -- can place the Board in a strong policy making position in the decade ahead. That decade will be marked by strong competition for increasingly scarce financial resources, both capital and operating budgets.

The action required to issue a revised master plan also presents an opportune moment to strengthen the flow and management of information. Valid and current information is essential to planning as a continuing process.

We thus strongly urge the Board to move ahead with the preparation of a revised master plan.

Continuing Planning and Information Flow

The revision of the master plan, as noted, is an opportune time for launching a continuing planning process.

A key element in that planning process is the flow of information between the individual colleges and the central office and the Board.

The individual colleges and the system as a whole

1. generate large amounts of data and information;

2. are subject to continuing requests for data and information from both inside and outside the system;

3. are expending large amounts of time and resources, it would appear, in dealing with the flow of data and information; and

4. are put at a disadvantage by the velocity and timing of the information activity being such that occasionally erroneous information has been issued or acquired. Corrected (and correctable) information was not produced in some cases.

In addition

5. the purposes of information requested by the central office is occasionally not clear to those in the field, i.e., at the local colleges;

6. there also appear to be redundancies in information requests, which are burdensome to all concerned; and

7. a coherent and congruent information flow system would be most welcomed.

One example of the difficulties in this regard was the information generated by and for a staff member of an important committee in the General Court in the spring of 1975.

A summary of that information is shown in Table 22, which has been corrected in part by Dober and Associates, Inc., based on individual submissions made by the presidents of some of the colleges on publication of the original--and in part erroneous--information.

Using corrected figures, the tabular information itself can be misleading.

For example, the use of budgeted faculty positions for administrative purposes comes about from educational necessity, not from institutional caprice--an important point that was overlooked in the original commentary attached to the tables. Staff positions should have been included to give a fair picture of the total institutional setting.

Average class size is not a meaningful distinction; mean size class would have been better.

The faculty salary picture could be misinterpreted, given the fact that a large number of day faculty are also compensated for additional teaching in the evening and summer programs.

TABLE TWENTY-TWO

SUMMARY CHARTS - COMMUNITY COLLEGES - FALL, 1974

COLLEGES	AUTHORIZED FACULTY POSITIONS	BUDGETED FAC.STUDENT RATIO	NO. OF FAC. REPORTED WITH CONT. HRS.	USED FAC.STUDENT RATIO	AVERAGE CLASS SIZE	ANNUAL $ VALUE OF FAC.	AVERAGE FACULTY SALARY	NATIONAL AVERAGE FACULTY SALARY	TOTAL CONTACT HRS. PER WEEK	AVERAGE CONT. HRS. PER FAC. MEMBER
BERKSHIRE	89*	17:1*	80*	19:1*	22	1,264,283*	14,205*	14,994	1,070*	13
BRISTOL	105	17:1	96	18:1	21	1,367,707	14,246	14,994	1,426	15
BUNKER HILL	105	17:1	83	22:1	28	1,090,627	13,140	14,994	965	12
CAPE COD	101	15:1	91	16:1	25	1,366,619	15,018	14,994	1,092	12
GREENFIELD	82	17:1	70	19:1	25	949,774	13,568	14,994	800	11
HOLYOKE	143*	17:1	143**	18:1*	25	1,833,680*	13,812	14,994	1,861*	13
MASS BAY COMMUNITY	102	17:1	79	22:1	26	1,173,358	14,852	14,994	1,009	13
MIDDLESEX	65	18:1	51	23:1	24	677,957	13,293	14,994	652	13
MASSASOIT	105	17:1	99*	18:1	26	1,353,371	12,303	14,494	1,170*	12*
MT. WACHUSETT	76	17:1	63***	21:1	24	881,420	13,991	14,994	736	12
NORTH SHORE	125	16:1	112	18:1	27	1,621,596	14,478	14,994	1,319	12
NORTHERN ESSEX	139	17:1	115	21:1	24	1,598,722	13,902	14,994	1,442	13
QUINSIGAMOND	112	15:1	105	16:1	29	1,458,965	13,895	14,994	1,230	12
ROXBURY	42	18:1	30	25:1	19	369,831	12,327	14,994	309	10
SPRINGFIELD	183	16:1	167	18:1	23	2,283,936	13,676	14,994	2,226	13
TOTALS	1,574*	17:1	1,384*	19:1	25	19,291,846*	13,944*	14,994	17,307*	12

*Corrected as per President's material furnished to us by MBRCC
**1 not funded, 14½ part-time, 121 full-time, ½ on sabbatical, 6 support staff
***3 full-time faculty positions for purposes of employing part-time people

SOURCE: Higher Education Faculty Teaching Loads and Salaries, Senate Ways and Means Committee, March 25, 1975
Dober and Associates, Inc., Spring 1975

These teaching responsibilities should also be accounted for in student-faculty ratios as a true picture of how the faculty uses its time.

The contact hours figure probably is not as revealing of effectiveness (if that is what is being measured) as credit hours.

Another example is a request from a legislative staff member for information on the system's capital improvements which was given prompt response. However, the material sent forward included a lengthy description of interim facilities that one of the colleges had abandoned seven months or more before.

These errors are symptomatic of the pressure being applied on those being asked to provide information for sometimes obscure reasons and under tight time schedules. Some of the difficulty is due to the system's not having a chance to initiate the information flow. It is then in a more vulnerable position by responding with inadequate data and information to inquiries.

8. Not unrelated to the above is the view held by some that the truly exciting, effective, productive, and perhaps even pioneering educational achievements by the individual colleges and the system as a whole are not being communicated to the general public in a way that raises its consciousness of and respect for the colleges and the system.

There are few reasons to think that the requests for information will lessen in the year ahead. The system should anticipate these requests and improve the management of information.

Accordingly, we recommend the following:

1. Heroic efforts have been made by the central office to install a management information system for some aspects of the Board's activities. These efforts should be recognized and strengthened.

2. An information management center should be established in the central office to coordinate the flow of information, with the objective of avoiding redundancies, assuring accuracy, etc.

3. The individual colleges should be surveyed to determine the type, timing, and content of data and information generated locally. A similar survey should be made of the central office's information activities. In consultation with the local units, uniform formats for reporting and summarizing data should be established wherever possible.

4. When the survey of information generation and information flow at the local colleges and central office has been completed, priorities should be established as to the type, content, and flow of information to and from the central office for master planning purposes. Attention should then be given to organizing that information flow so that it is readily available to the Board and others.

5. The following information surveys should be considered as essential to the revision of the present master plan and for continuous long-range planning. Those surveys marked with an asterisk are now available or about to be used by the central office in whole or in part.

a. Student Profile Survey*

This survey produces a coherent description of all enrolled students in a uniform format.

b. Budget Analysis Survey*

This survey displays how the various state appropriations are allocated to functional categories for cost accounting purposes.

This allocation is made at the start of the fiscal year. A comparable analysis could be made at the end of the fiscal year to show how the funds allocated were actually spent.

Differences can be identified and the causes defined.

c. Faculty Profile Study*

The present survey form (under consideration) identifies faculty characteristics, teaching activities, and related data.

With the advice of local units as to format, the survey might be extended to cover nonscheduled teaching activities, using perhaps some version of the NCHMS Faculty Activity Analysis Module.

d. Resources Requirements Prediction Model*

This is now being field tested at Bristol, Quinsigamond, and Massasoit Community Colleges.

A revised version should then be developed and applied at all the colleges.

This material would seem to be essential for any forward-looking programming decisions.

e. Space Utilization

A proposed format has been designed as part of the Dober and Associates present study.

This matter is covered more fully in the earlier description of planning issues, space utilization.

f. Educational Achievement Survey

A survey and summary of the educational achievements at each college and the system as a whole should be produced annually.

This would cover all programs and educational services provided the colleges--day, evening, and other.

The above would be recorded by age, sex, economic status, race, program, and other

characteristics identified as useful in measuring the efficacy of the colleges and the system to meet its educational goals and objectives.

Conceivably, at some later date it may be possible to meld this information with some of the other data and surveys so as to quantify the cost and benefits of each educational achievement.

6. The above information, attractively presented on an annual basis in the form of a fact sheet or fact book, could help inform the public about the considerable achievements of the colleges and the system.

   In addition, some selected facets might be reported out annually as a special feature--not unlike the Department of Agriculture's Annual Yearbook.

   An example of this kind of report might be something called How People Learn.

   This would describe the many modes of learning, the ways the community colleges are organized to respond to these modes, and the achievements they have had in dealing with a wide variety of learners.

   Material here is readily available for such a report which would focus, of course, on the Massachusetts community colleges.

   Outside support for drawing together this information and preparing the report might be available from foundations or even the federal government.

Some other ideas include the possibility that certain colleges might wish to band together to prepare a documentary for educational TV on some aspect of their activities. Topics here might deal with educational work with the elderly, the handicapped, institutional populations (hospitals and prisons), housewives just out of the child-rearing stage, etc.

Finally, a few words on management information systems in general and how the above information surveys fit into some theoretical setting.

It may be comforting to think that policy formulation and policy evaluation could be shaped by a systems approach to higher education, particularly some form of operations research or statistical decision theory.

The six recommended information surveys described earlier are but a pale reflection of what would be needed to install a genuine systems approach. To have one would require

1. a highly articulated and focused set of goals and objectives;

2. an agreed upon comprehensive view of the roles of the colleges and central office in meeting those goals and objectives;

3. mathematically quantifiable information for measuring the facts and values related to goals, objectives, functions, and outcomes;

4. an agreed upon evaluation technique for using the information;

5. a method for agreeing upon the results of the evaluations; and

6. a method for using the results in policy formulation and decision making.

There is no evidence that such a system would be welcomed by the colleges, could be funded, or could be operated by the Board. Thus, any fears held by the local colleges--and there are some--that a computer-based, ponderous, anonymous, analytical information system is going to displace human reckoning is groundless.

What is being called for in the above recommendations is a reflective, coordinated, economic approach to generating, sharing, and communicating information in a format that constructively advances the causes of the individual colleges and the system as a whole.

Richard P. Dober, AIP
DOBER AND ASSOCIATES, INC.

June 26, 1975

APPENDIX A INFORMATION AVAILABLE

People

(1) Historic Data - Day FTE Enrollment
Evening Enrollment

(2) Profile of Prospective Applicants for Admission
1972-73 College Bound High School Seniors

(3) Personnel Distribution FY 1975
Positions as of 1974, Governor Recommended, Added by Legislation, Total New Positions

(4) Personnel Distribution FY 1975
Filled Positions, New Positions

(5) Guidelines for Projecting Staff Needs

(6) Demographic: Historic Birth Rate Data: Massachusetts

(7) Demographic: Historic High School Enrollments and Graduation Data; Massachusetts

(8) Demographic College Enrollments and Projections

Program

(9) Enrollment Data by Programs
Fall 1974

(10) Community College Career Program Enrollments
Fall 1967-1974, % Age Change

(11) Career Program Enrollments By College

(12) Senate Ways and Means Report on Admissions and Placement - Program Profile

(13) Five Year Program Planning Priorities

Facilities (14) Land Acquisition

Financial (15) Budget Analysis FY 74, FY 75 01-16 Accounts

(16) State Appropriations and Recommendations FY 76 By College

APPENDIX B

COMMUNITY COLLEGES' PRIORITIES

(Report to Secretary of Education - 1975)

Berkshire		
Bristol	(1) Release of funds for the construction of the student center and leisure complex	$ 9,000,000
	(2) Construction of outdoor athletic fields and additional site and road work according to FY'76 capital request	$ 1,500,000
	(3) Construction of the remainder of Phase II to complete campus according to the FY'76 capital outlay request	$ 8,400,000
Bunker Hill	(1) Word change to increase the total project cost enabling us to spend the funding appropriated in Chapter 519, Acts of 1974, for the plans and construction of the library/ cafeteria including F & E.	
	(2) Conveyance from the BRA Parcels 15-b + 15-2.	
	(3) Planning money for Phase II and construction money for playing fields as requested on the FY'76 capital outlay.	$ 1,300,000
	(4) The Legislature has approved a word change to allow us to construct a parking structure on land now leased from the Boston Redevelopment Authority. We have signed a five year lease for this land.	

Cape Cod	(1) Additional planning money to update the original college master plan to facilitate an orderly transfer into a more career oriented program to meet today's labor market demands.	$ 35,000 (approximate)
Greenfield	(1) Funding for the preparation of preliminary plans and specifications for the gymnasium and auditorium	$ 80,000
	(2) Funding (if necessary) for the purchase of additional land	$ 150,000
	(3) Funding for the development of the additional land (if necessary) as requested in FY'76 capital outlay	_____
Holyoke	(1) Construction money for the physical education center and the college center which is requested in the FY'76 capital outlay.	$10,860,000
	(2) We have received legislative approval for a word change to allow for food service programs as well as for the construction of a natatorium as part of the physical education facility. Both of these word changes are incorporated in the current deficiency budget document.	
Mass Bay	(1) Additional funds for renovations as requested in the FY'76 capital outlay	$ 700,000
	(2) Planning money for the new campus as requested in the FY'76 capital outlay	$ 700,000

(3) We have requested that the master planner and the renovation architect consider the relocation of the relocatable classrooms from Watertown to the permanent Wellesley campus. We should be receiving the cost figures for this move in the near future.

(4) In addition, the Raytheon lease for the Watertown campus states that the facility is to be returned to its status prior to the signing of the original lease. The cost figures for this work should also be available soon.

Massasoit

Middlesex

(1) Release of funds appropriated in Chapter 519, Acts of 1974, for the appraisals and purchase of the Marist Fathers' property in Bedford, and money for the development of educational specifications and preliminary plans and specifications $ 3,000,000

Mt. Wachusett

Approval of the project synopsis by Administration and Finance to allow the gymnasium and the playing fields to go out to bid. (funding was appropriated in Chapter 976, Acts of 1971)

North Shore

Release of funds appropriated in Chapter 976, Acts of 1971 to purchase the Carnavale land for the permanent site $ 66,000

Northern Essex	Planning money for the Administration/Speech and Arts Center is requested in the FY'76 capital outlay	$ 228,000
Quinsigamond	(1) Concurrence from the Secretaries of A & F and Education for the construction of a parking structure to enable the Board to approve the master plan	
	(2) Release of funds for third floor building renovations to accommodate the approximately 800 students recently transferred from the Belmont Street campus	$ 560,000
	(3) Release of fund for the preparation of plans including parking structure	$ 750,000
Roxbury	(1) Identification of the permanent site (funding is available for this purpose)	$ 2,500,000
	(2) Activate architect to plan permanent facility	
Springfield	(1) Approval of a word change to use balance of the $125,000 appropriated in 1974, in order to update the master plan	$ 75,000
	(2) Construction money for the library/learning resource center is requested in the FY'76 capital outlay	$ 4,476,000
	(3) Planning money for the parking structure, student center and physical education building as requested in the FY'76 capital outlay	$ 800,000

77

UNIVERSITY OF CALIF.
LOS ANGELES

JUL 30 1976

CLEARINGHOUSE FOR
JUNIOR COLLEGES